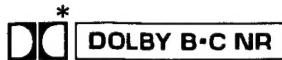


Service Manual

Cassette Deck

Dolby B • C NR-Equipped
Stereo Double Cassette Deck



RS-X888

Color

(K)... Black Type



Color	Areas
(K)	[E].....All European areas except United Kingdom.
(K)	[EK].....United Kingdom.
(K)	[EH].....Holland.
(K)	[EG].....F.R. Germany.
(K)	[XA].....Asia, Latin America, Middle East and Africa.
(K)	[XL].....Australia.
(K)	[XB].....Saudi Arabia.

SPECIFICATIONS

Deck system	Stereo cassette deck
Track system	4-track, 2-channel
Heads	
(DECK A) REC/PLAY	Solid permaloy head
Erasing	Double-gap ferrite head
(DECK B) PLAY	Solid permaloy head
Erasing	Double-gap ferrite head
Motors	
(DECK A) Capstan/reel table drive	2 speed electronically controlled DC motor
(DECK B) Capstan/reel table drive	2 speed electronically controlled DC motor
Recording system	AC bias
Bias frequency	77kHz
Erasing system	AC erase
Tape speed	4.8cm/sec. (1-7/8 ips.)
Frequency response	
METAL	30Hz~18kHz (±15dB) 40Hz~17kHz (DIN)
CrO ₂	30Hz~17kHz (±15dB) 40Hz~16kHz (DIN)
NORMAL	30Hz~16kHz (±15dB) 40Hz~15kHz (DIN)
S/N	(signal level=max. recording level, CrO ₂ type tape)
DOLBY C NR on	74dB (CCIR)
DOLBY B NR on	66dB (CCIR)
DOLBY NR off	56dB (A weighted)
Wow and flutter	0.07% (WRMS), ±0.2% (DIN)
Fast Forward and Rewind Time	Approx. 95 seconds with C-60 cassette tape
Input sensitivity and impedance	
LINE	60mV/47kΩ
Output voltage and impedance	
LINE	400mV/1.5kΩ
Power consumption	22W
Power supply	
For Continental Europe	AC 220V, 50Hz/60Hz
For Others	AC 110V/127V/220V/240V, 50Hz/60Hz
Dimensions (W × H × D)	360×128×296mm
Weight	5.1kg

* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.

“Dolby” and the double-D symbol are trade marks of Dolby Laboratories Licensing Corporation.

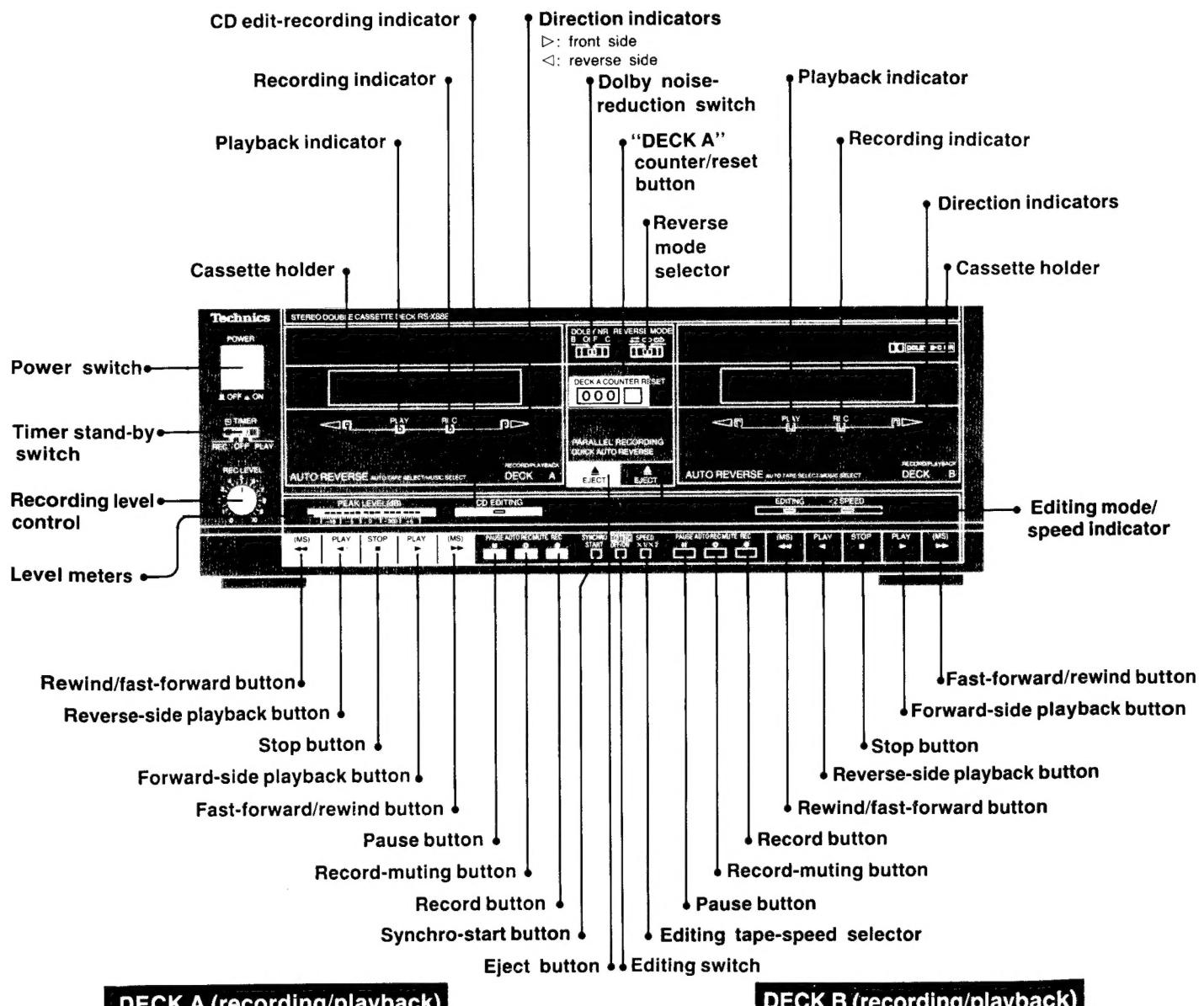
Technics

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Dsaka Japan

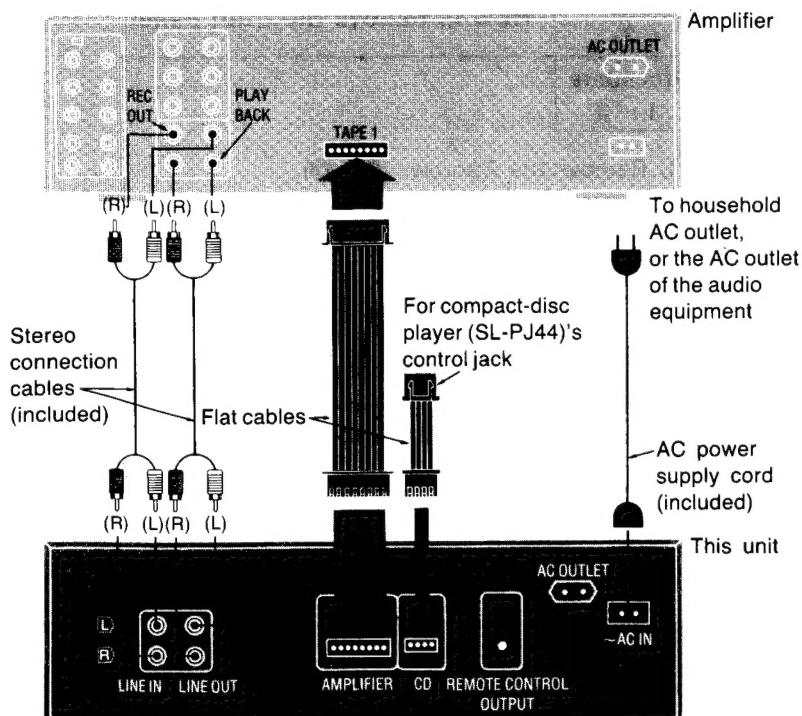
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LOCATION OF CONTROLS



■ HOW TO CONNECTION



Notes:

Remote control output terminal:

This terminal can be used only with Technics graphic equalizer or compact disc player having a remote control terminal for a tape deck.

(Refer to the operating instructions of the amplifier.)

AC outlet

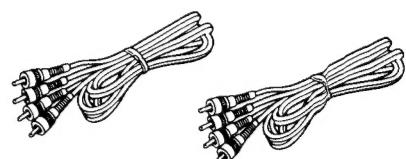
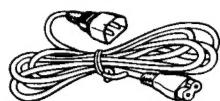
Do not exceed the indicated power rating when connecting to this outlet.

*:(For Technics amplifier model SU-X880, SU-X860 only.)

The configuration of the AC outlet and AC power supply cord differs according to area.

■ ACCESSORIES

- AC power supply cord 1
- Flat cables for remote control 2
- Stereo connection cables 2

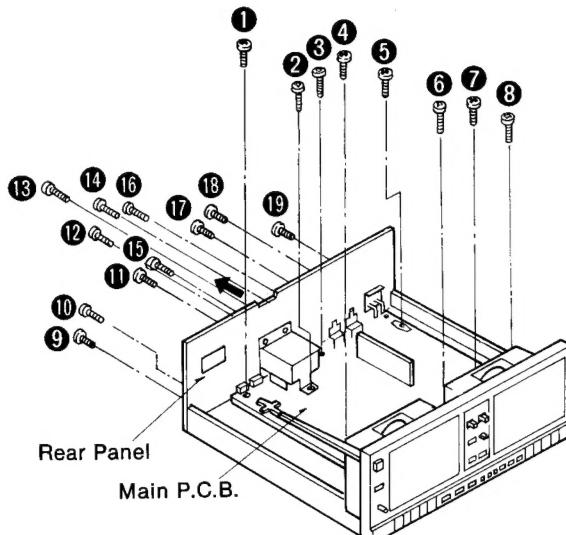
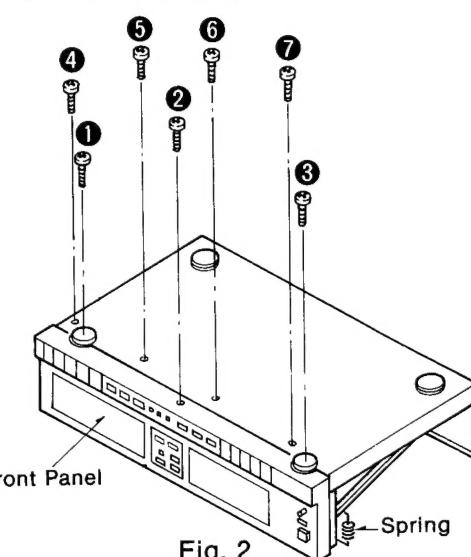
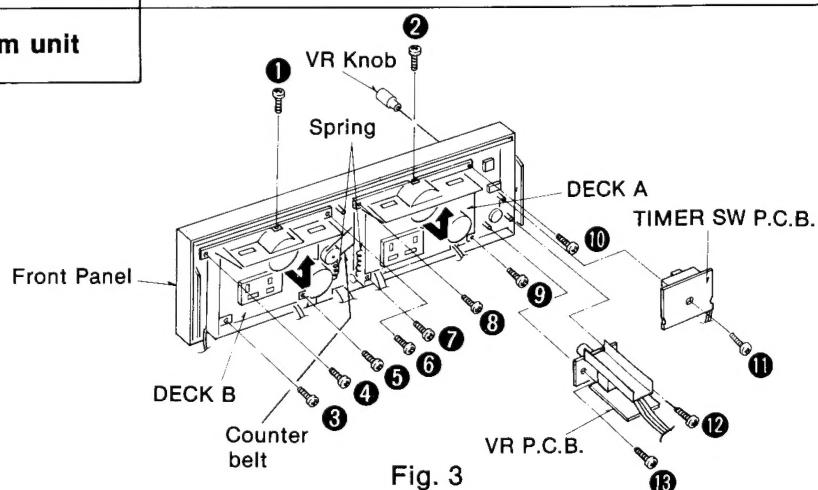


(SFDAC05E03 [E, EG, EH])
 SJA168-1 [XA]
 SJA173 [XL]
 SJA183 [XB]
 SJA188 [EK]

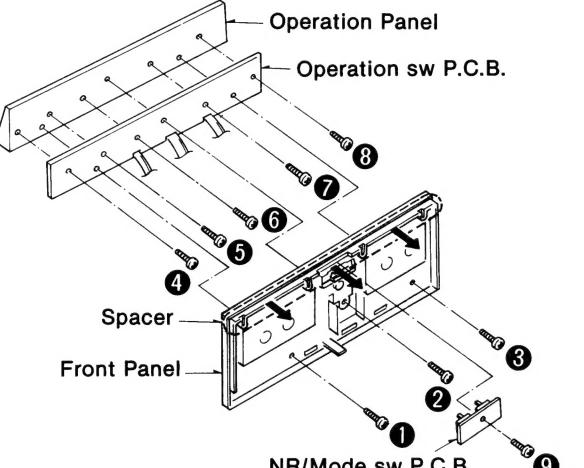
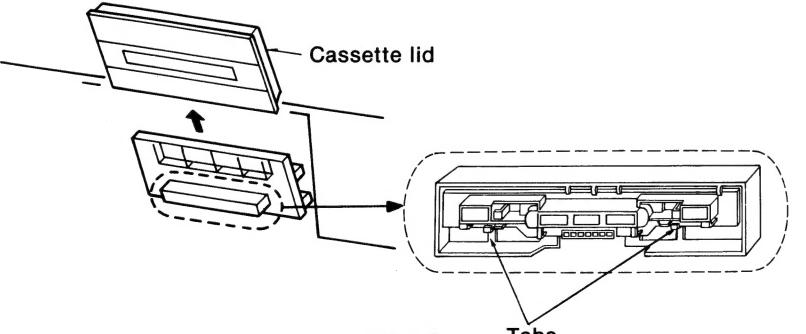
(SWKSX888-KE)
 SWKSX888-KE1

(SJP2264)
 SJPK2202

■ DISASSEMBLY INSTRUCTIONS

Ref. No. 1	How to remove the cabinet	Ref. No. 3	How to remove the front panel
Procedure 1	• Remove the 6 screws.	Procedure 1 → 3	
Ref. No. 2	How to remove the main P.C.B.		
Procedure 1 → 2			
<p>1. Remove the 19 screws (1~19). 2. Remove the Rear panel in the direction of arrow, and then remove the Main P.C.B.</p>  <p>Fig. 1</p>			<p>1. Remove the 7 screws (1~7). 2. Remove the spring. 3. Push the Eject button, and then remove the front panel.</p> <p>NOTE: If the mechanism stops in play state while the tape is running, the head PCB is lifted and stuck, and the cassette lid will not open if the eject button is pressed. In such a case, turn the main gear by hand, or apply a DC 12V power directly to capstan motor + and - terminals from the power supply jig (SZZA1047F). Then the head PCB is lowered, and the mechanism comes into stop state, so that eject operation is enabled.</p>  <p>Fig. 2</p>
Ref. No. 4	How to remove the mechanism unit		
Procedure 1 → 3 → 4	<p>1. Remove the 10 screws (1~10). 2. Remove the Counter belt (for DECK A). 3. Remove the Springs. 4. Push the Eject button. 5. Remove the Mechanism (DECK A, B) in the direction of arrow.</p>  <p>Fig. 3</p>		

MEASUREMENT AND ADJUSTMENT METHODS

Ref. No. 5	How to remove the timer sw P.C.B. and VR P.C.B.
Procedure 1 → 5	
	<ol style="list-style-type: none"> 1. Remove the one screw (1), and then remove the Timer sw P.C.B. (See Fig. 3). 2. Remove the VR knob (See Fig. 3). 3. Remove the 2 screws (12, 13), and then remove the VR P.C.B. (See Fig. 3).
Ref. No. 6	How to remove the operation sw P.C.B. and NR/Mode sw P.C.B.
Procedure 1 → 3 → 4 → 6	
	<ol style="list-style-type: none"> 1. Remove the 3 screws (1~3), and then remove the Operation panel. 2. Remove the 5 screws (4~8), and then remove the Operation sw P.C.B. 3. Remove the Spacer in the direction of arrow. 4. Remove the one screw (9), and then remove the NR/Mode sw P.C.B.
	 <p>Fig. 4</p>
Ref. No. 7	How to remove the LED P.C.B.
Procedure 7	
	<ol style="list-style-type: none"> 1. Push the Eject button. 2. Remove the Cassette lid. 3. Push down the 2 Tabs aside, and then remove the LED P.C.B.
	 <p>Fig. 5</p>

Measurement Condition

- Input level controls; Maximum
- Editing switch; Off
- Noise reduction select switch; Off
- Editing tape speed switch; X1
- Timer start switch; Off

- Reverse mode selector; \Rightarrow
- Make sure heads are clean
- Make sure capstan and pressure roller are clean
- Judgeable room temperature $20 \pm 5^\circ\text{C}$ ($68 \pm 9^\circ\text{F}$)

Measuring instrument

- EVM (Electronic Voltmeter)
- Oscilloscope
- Digital frequency counter
- AF oscillator

- ATT (Attenuator)
- DC voltmeter
- Resistor (600Ω)

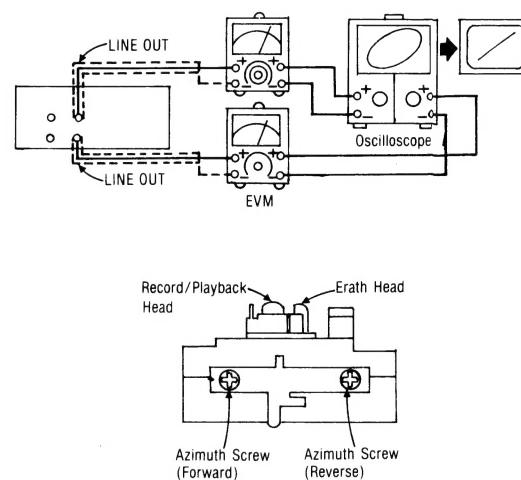
Test tape

- Head azimuth adjustment (8kHz, -20dB); QZZCFM
- Tape speed adjustment (3kHz, -10dB); QZZCWAT
- Playback frequency response (315Hz, 12.5kHz, 10kHz, 8kHz, 4kHz, 1kHz, 250kHz, 125kHz, 63kHz, -20dB); QZZCFM

- Playback gain adjustment (315Hz, 0dB); QZZCFM
- Overall frequency response, Overall gain adjustment
- Normal reference blank tape; QZZCRA
- CrO₂ reference blank tape; QZZCRX
- Metal reference blank tape; QZZCRZ

HEAD AZIMUTH ADJUSTMENT

1. Playback the azimuth adjusted part (8kHz, -20dB) of the test tape (QZZCFM) and regulate the angle adjusting screw so that the outputs of L-CH and R-CH are maximized. (When the adjusting positions are different with L-CH and R-CH, find a position where the L-CH and R-CH are balanced, and then make the adjustment.)
2. At the same time, draw a lissajous waveform and eliminate phase deflection.
3. Perform the same adjustment in reverse play mode.



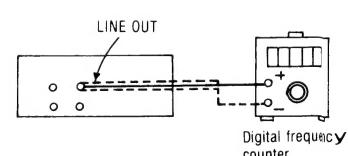
Forward and reverse rotation level difference check

4. Playback the playback gain adjusted part (315Hz, 0dB) of the test tape (QZZCFM), and then check that the forward and reverse rotation level difference is within 1dB.
5. After the adjustment apply screw-lock to the angle adjusting screw.

TAPE SPEED ADJUSTMENT (DECK A, B)

High speed

1. Set the editing tape speed switch to "X2" and ground the Deck B=TP3 and Deck A=TP4.
2. Playback the middle part of the test tape (QZZCWAT).
3. Adjust Deck B=VR803 and Deck A=VR804 so that the output is within the standard.



Normal speed

4. Set the editing tape speed switch to "X1" and open the Deck B=TP3 and Deck A=TP4.
5. Playback the middle part of the test tape (QZZCWAT).
6. Adjust Deck B=VR801 and Deck A=VR802 so that the output is within the standard.

Standard value: $3000 \pm 15\text{ Hz}$ (Normal), $6000 \pm 30\text{ Hz}$ (High)

PLAYBACK FREQUENCY RESPONSE

1. Playback the playback frequency response part (315Hz, 12.5kHz~63Hz, -20dB) of the test tape (QZZCFM).
2. Check that the frequency is within the range shown in Fig. 1 for both L-CH and R-CH.

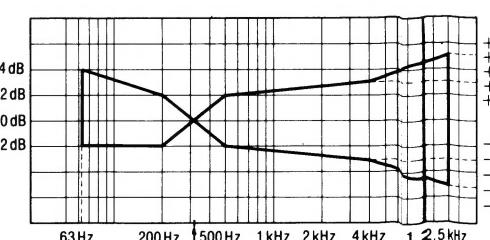
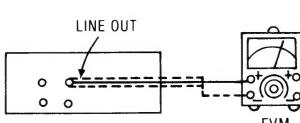
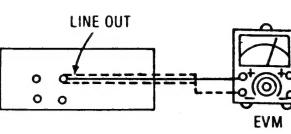


Fig. 1

PLAYBACK GAIN ADJUSTMENT (DECK A, B)

1. Playback the playback gain adjusted part (315Hz, 0dB) of the test tape (QZZCFM).
2. Adjust Deck B=VR1 (L-CH) [[VR2 (R-CH)]] and Deck A=VR3 (L-CH) [[VR4 (R-CH)]] so that the output is within the standard.

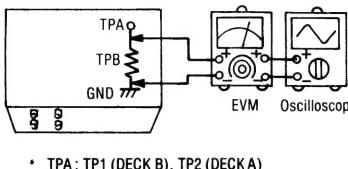
Standard value: $0.4V \pm 0.5dB$



ERASE CURRENT ADJUSTMENT (DECK A, B)

1. Insert a metal tape.
2. Press the record and pause buttons.
3. Adjust VR301 (DECK B) [[VR302 (DECK A)]] so that the output between TP1 (DECK B) [[TP2 (DECK A)]] and ground is within the standard.

Standard value: $170 \pm 5mA$ (Metal) ($170 \pm 5mV$)



OVERALL FREQUENCY RESPONSE (DECK A, B)

1. Set a normal blank tape (QZZCRA) and record by applying signal (50Hz~12.5kHz), 20dB attenuated from the reference input level signal (1kHz, -24dB).
2. Playback the signal recorded in step 1, and check that the level of each output frequency is within the range shown in Fig. 2 in comparison with the reference frequency (1kHz).
3. If it is not within the standard range, adjust the bias current by Deck B=VR9 (L-CH) and Deck A=11 (L-CH) [[Deck B=VR10 (R-CH) and Deck A=VR12 (R-CH)]] so that the frequency level is within the standard.
 - Level up in high frequency range ... Increase the bias current.
 - Level down in high frequency range ... Decrease the bias current.
4. After that, increase the signal recorded on CrO₂ blank tape (QZZCRX) and metal blank tape (QZZCRZ) up to 14kHz and adjust in the same way as mentioned above and check that the frequency level is within the range shown in Fig. 3.

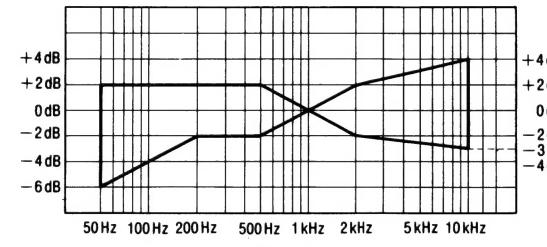


Fig. 2

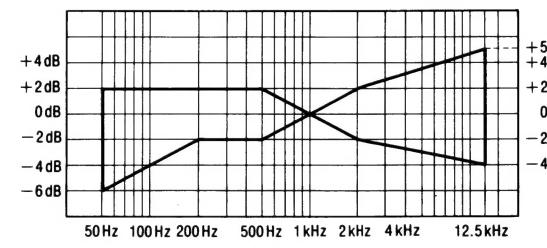
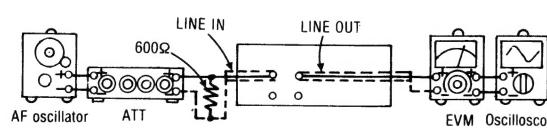


Fig. 3

OVERALL GAIN ADJUSTMENT (DECK A, B)

1. Set a normal blank tape (QZZCRA) and apply the reference input level signal (1kHz, -24dB) in record pause mode.
2. Adjust the output 0.4V by attenuator and then record.
3. Playback the signal recorded in step 2, and check that the output is within the standard.
4. If it is not within the standard, adjust Deck B=VR5 (L-CH) and Deck A=VR7 (L-CH) [[Deck B=VR6 (R-CH) and Deck A=VR8 (R-CH)]] and repeat the step (1), (2) and (3) until the output is within the standard.

Standard value: $0V \pm 0.5dB$



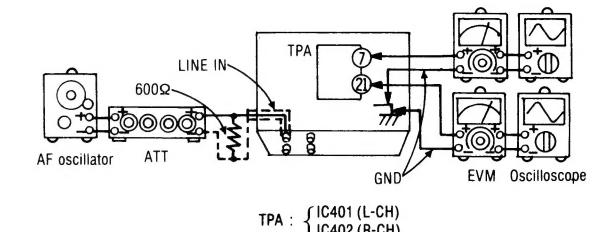
DOLBY NR CIRCUIT

1. Set a normal tape and apply 1kHz signal in record pause mode.
2. Adjust by attenuator so that the output between terminal 7 of IC401 (L-CH) [[IC402 (R-CH)]] and ground is 12.3mV.

— Dolby B (Encode characteristic) —

3. Set NR switch to "Dolby B" and change the input signal to 1kHz, 5kHz.
4. Check that the output between terminal 21 of IC401 (L-CH) [[IC402 (R-CH)]] and ground change as specified from the level in NR out mode.

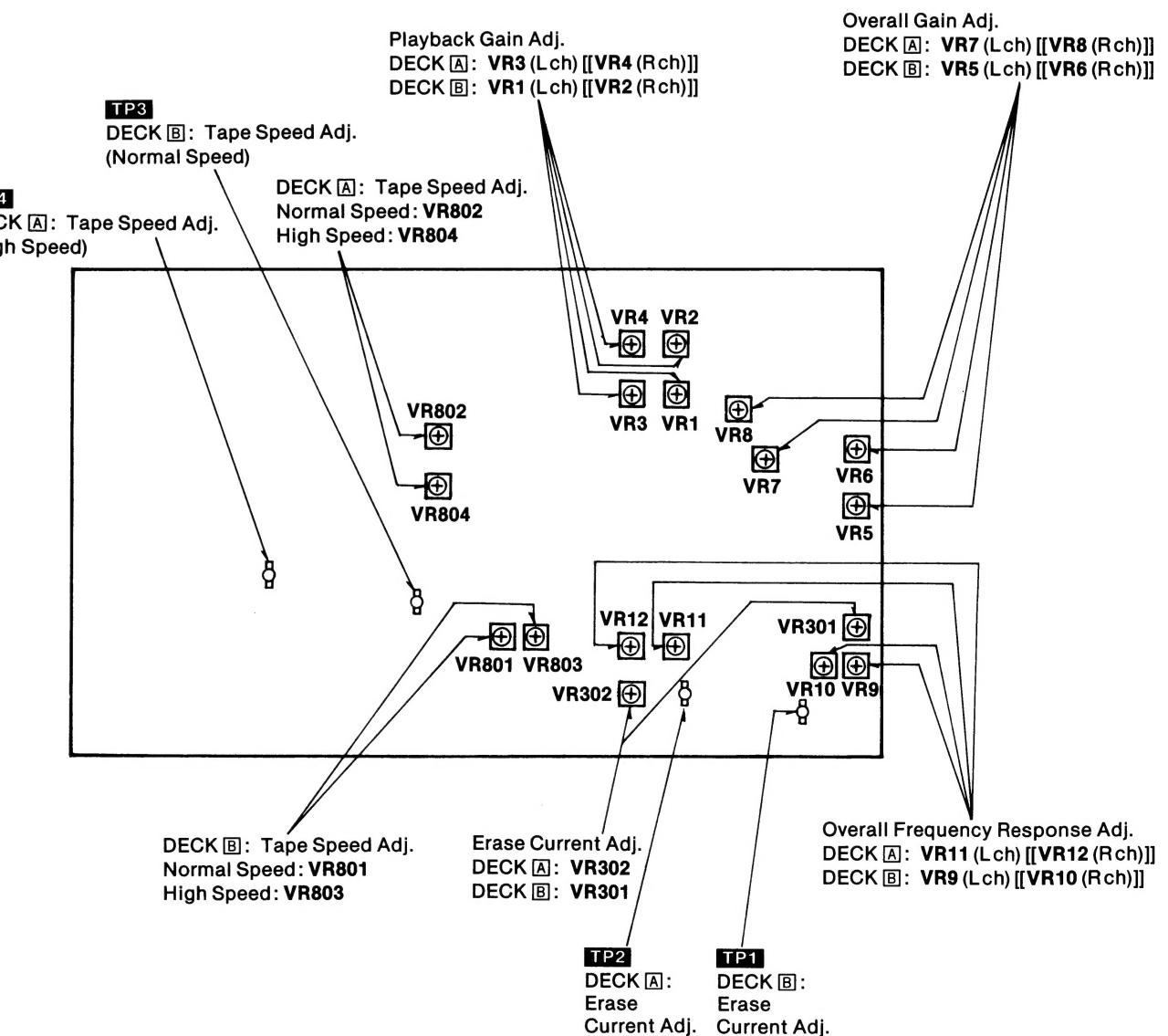
Standard value: $6 \pm 2.5dB$ (1kHz), $8 \pm 2.5dB$ (5kHz)



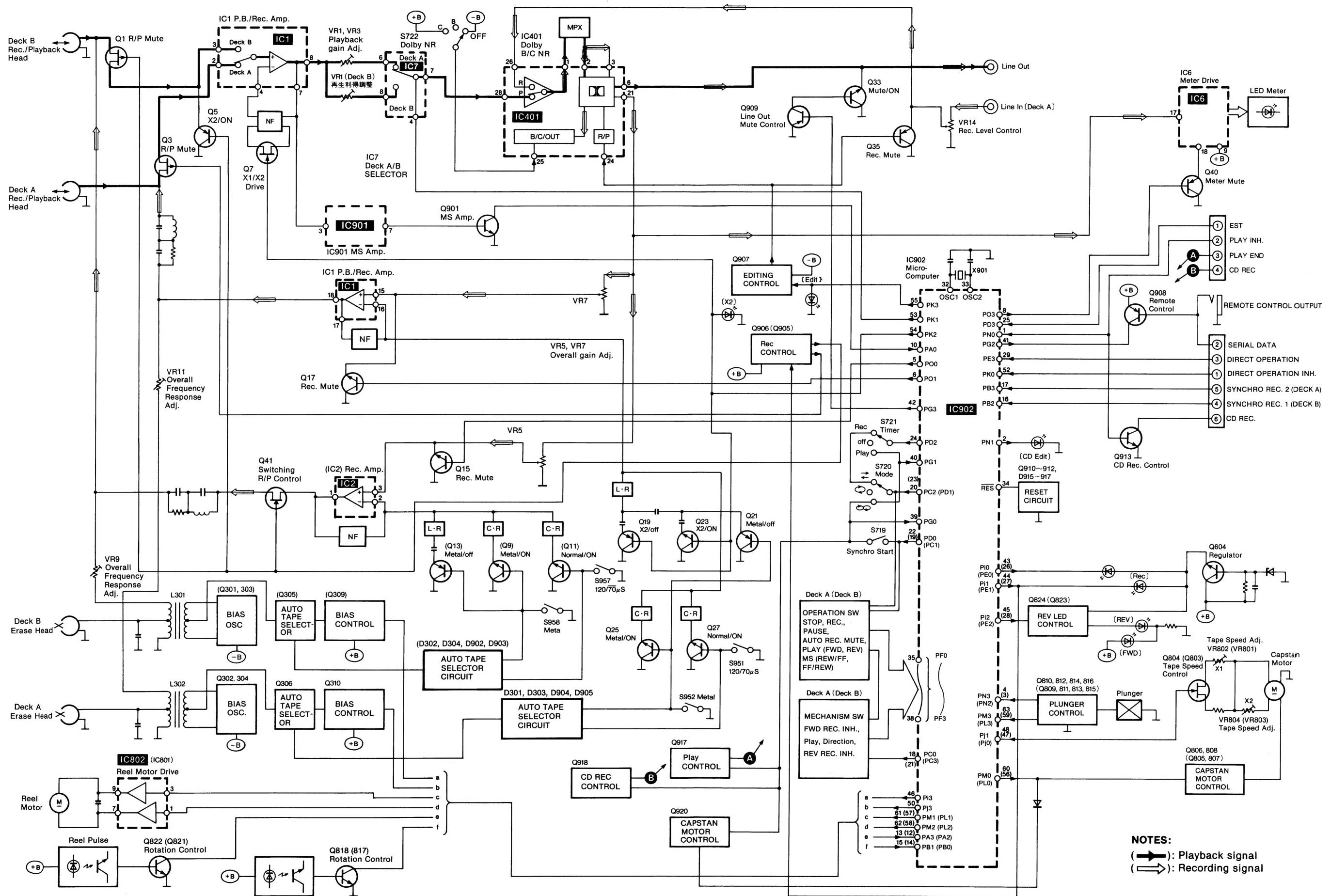
— Dolby C (Encode characteristic) —

5. Set NR switch to "Dolby C" and change the input signal to 1kHz, 5kHz.
6. Check that the output between terminal 21 of IC401 (L-CH) [[IC402 (R-CH)]] and ground change as specified from the level in NR out mode.

Standard value: $11.5 \pm 2.5dB$ (1kHz), $8.5 \pm 2.5dB$ (5kHz)



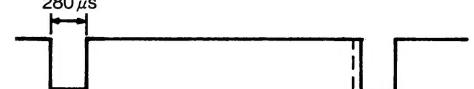
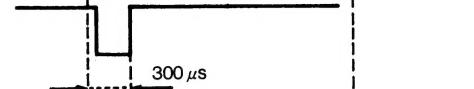
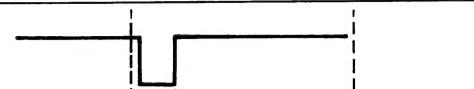
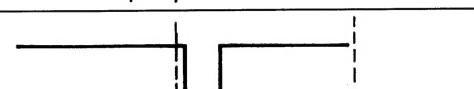
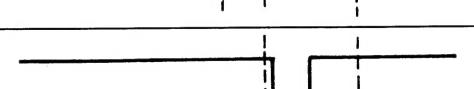
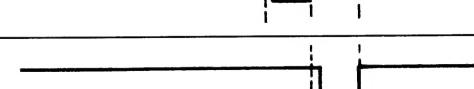
■ BLOCK DIAGRAM



■ MICROCOMPUTER TERMINAL FUNCTION AND WAVEFORM

IC902 (LC6554D-3299)

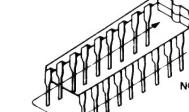
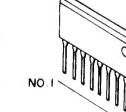
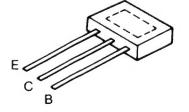
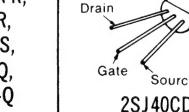
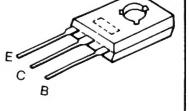
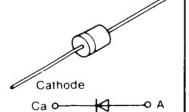
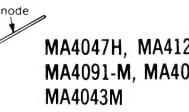
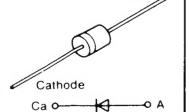
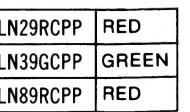
Terminal No.	Symbol	Function/Operation
1	PN0	• "H" in CD editing rec mode, and "L" in other mode.
2	PN1	CD editing LED • Light up only in CD editing rec mode. • When CD editing LED light up, the level goes "H".
3	PN2	• "H" in Deck B MS search mode.
4	PN3	• "H" in Deck A MS search mode.
5	PO0	Deck B Rec Mute control • "H" in Stop, FF, REW and Play mode. • When Auto Rec Mute button is pressed in Rec Pause mode, the level changes from "L" to "H", and changes to "L" with the button released. • When Auto Rec Mute button is pressed in Rec Play mode, the level goes "H". It changes to "L" 4.0sec. later in normal speed mode, and 2.5sec. later in high speed mode.
6	PO1	Deck A Rec Mute control • "H" in Stop, FF, REW and Play mode. • When Auto Rec Mute button is pressed in Rec Pause mode, the level changes from "L" to "H", and changes to "L" with the button released. • When Auto Rec Mute button is pressed in Rec Play mode, the level goes "H". It changes to "L" 4.0sec. later in normal speed mode, and 2.5sec. later in high speed mode.
7	PO2	• Non connection.
8	PO3	Deck A Meter Mute control • "H" in Stop, FF and REW mode. • In Rec Pause, Rec Play mode, "H" only in PO0 is "H" level.
9	PP0	• Non connection.
10	PA0	Non signal input • It goes "H" in non signal MS search mode.
11	PA1	• Power off detection
12	PA2	Deck B Reel table Pulse input • The rotation of reel table is detected by photo senser.
13	PA3	Deck A Reel table Pulse input • The rotation of reel table is detected by photo senser.
14	PB0	Deck B Leader tape detection input • "L" level pulses are generated between the leader tape section and the magnetic section. (approx. 100sec.)
15	PB1	Deck A Leader tape detection input • "L" level pulses are generated between the leader tape section and the magnetic section. (approx. 100sec.)
16	PB2	Deck B Synchro rec detection • "L" in CD Play mode, and "H" in other mode.
17	PB3	Deck A Synchro rec detection • "L" in CD Play mode, and "H" in other mode.

Terminal No.	Symbol	Function/Operation
18	PC0	Scan output 
19	PC1	
20	PC2	
21	PC3	
22	PD0	
23	PD1	
24	PD2	
25	PD3	End of tape detection • "L" in end of tape detected, and "H" in reverse mode.
26	PE0	Deck B Play control • "L" in Play and Rec Play mode. • In Pause, Rec Pause and MS search mode, the level goes "H" ⇌ "L".
27	PE1	Deck B Rec control • "L" in Rec Pause and Rec Play mode.
28	PE2	Deck B Reverse control • "L" only in Reverse mode.
29	PE3	Direct operation 
30	TEST	Test terminal • Used for microcomputer test, and usually connected to Ground.
31	V _{ss}	GND terminal • Connection to Ground.
32	OSC1	Clock OSC terminal • About 1.7V DC, but microcomputer does not work with probe connected.
33	OSC2	Clock OSC terminal • Oscillation at about 3MHz.
34	RES	Reset terminal • Used for microcomputer reset, and the level goes "H".
35	PF0	Input switch stage reading with scan output • Input of Deck A, B, forward rec inhibit switch, forward REW switch (◀◀) and auto rec mute switch.

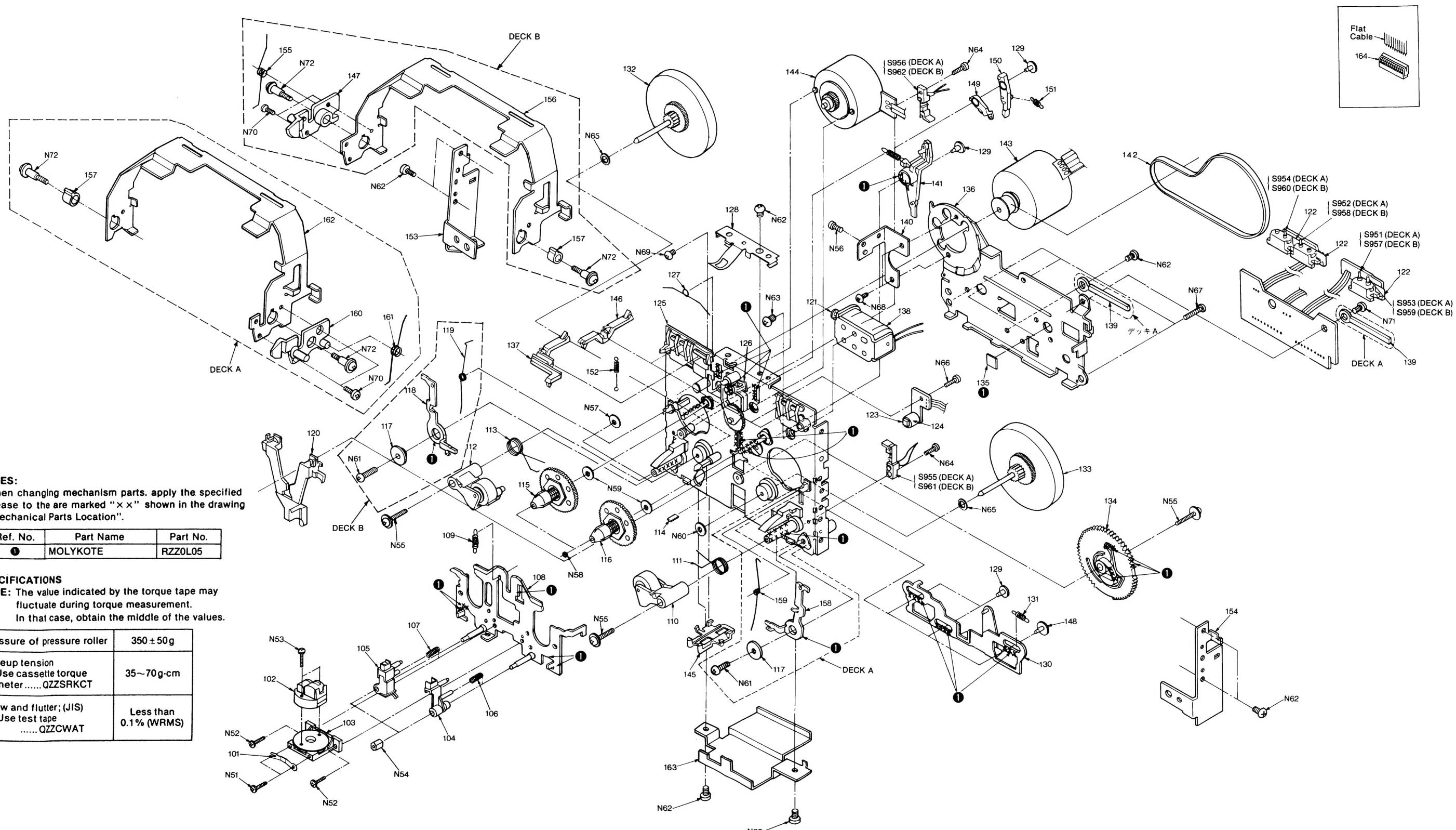
Terminal No.	Symbol	Function/Operation
36	PF1	Input switch stage reading with scan output •Input of Deck A, B, Reverse rec inhibit switch, forward FF switch (▶▶) and Pause switch.
37	PF2	Input switch stage reading •Input of Deck A, B, Play switch, Reverse Play switch (◀) and Rec switch.
38	PF3	Input switch stage reading •Input of Deck A, B, Direction switch, forward Play switch (▶), stop switch.
39	PG0	Input switch stage reading •Input of Synchro start switch, Reverse mode switch (↔), CD Editing switch and Timer rec switch.
40	PG1	Input switch stage reading •Input of Editing switch, Reverse mode switch (↔↔), ×1/×2 Editing speed selector switch, Play end and Timer Play switch.
41	PG2	Remote control data input
42	PG3	Line out Mute control output •“H” in Play mode.
43	Pi0	Deck A Play control •“L” in Play and Rec Play mode. •In Pause, Rec Pause and MS search mode, the level goes “H” ↔ “L”.
44	Pi1	Deck A Rec control •“L” in Rec Pause and Rec Play mode.
45	Pi2	Deck A Reverse mode control •“L” only in Deck A Reverse mode.
46	Pi3	Deck B Bias OSC control •“L” in Deck B Rec Play mode.
47	Pj0	Deck B Tape speed control •“L” only in high speed (×2).
48	Pj1	Deck A Tape speed control •“L” only in high speed (×2).
49	Pj2	Muting control •“H” in Play, Rec and Editing rec mode.
50	Pj3	Deck A Bias OSC control •“L” in Deck A Rec Play.
51	Vp	Power supply terminal for Pull Down Resistor.
52	PK0	Direct operation inhibit output •“H” in Rec Pause or Rec Play mode.
53	PK1	Deck A Play control •“H” only in Deck A Play mode.
54	PK2	Editing speed control •“H” only in ×2 Editing mode.
55	PK3	Editing mode control •“H” only in Editing mode.
56	PL0	Deck B Capstan motor control •“H” only in Deck B Play and Rec Play mode.
57	PL1	Deck B Forward FF/REW motor control •“H” only in Deck B Forward Play FF mode.

Terminal No.	Symbol	Function/Operation
58	PL2	Deck B Reverse FF/REW motor control •“H” only in Deck B Reverse Play REW mode.
59	PL3	Deck B Play plunger control •When mechanism mode is changed over, the level goes “H” for short time.
60	PM0	Deck A Capstan motor control •“H” only in Deck A Play and Rec Play mode.
61	PM1	Deck A Forward FF/REW motor control •“H” only in Deck A Forward Play FF mode.
62	PM2	Deck A Reverse FF/REW motor control •“H” only in Deck A Reverse Play FF mode.
63	PM3	Deck A Play plunger control •When mechanism mode is changed over, the level goes “H” for short time.
64	V _{DD}	Power supply terminal •Operative on 4.5~5.5 volts.

■ TERMINAL GUIDE OF IC'S, TRANSISTORS AND DIODES

	AN6888 AN7016K LC6554D-3299 TEA0665	18 Pin 30 Pin 64 Pin 28 Pin		M5218L MN6634 BA6218	8 Pin 9 Pin 9 Pin
	2SA1309A-R, 2SD1330R, 2SA1253-S, 2SB1030Q, 2SC3311-Q	Drain Gate Source		2SJ40CD, 2SK381	2SD592NC-R, 2SB621A-R, 2SA885Q
	2SC1846-R	E C B		UN4111 UN4113	UN4213, UN4211
	UN4116, UN4115	E C B		MA4047H, MA4120, MA4091-M, MA4062-M, MA4043M	UN4215
	ISR35200, MA165	Anode Cathode Ca		LN29RCPP LN39GCPP LN89RCPP	RED GREEN RED

■ MECHANICAL PARTS LOCATION



REPLACEMENT PARTS LIST

Ref. No.	Part No.	Part Code	Description	Ref. No.	Part No.	Part Code	Description				
CASSETTE DECK											
101	SMQA1094	016 726 0887 5	COIL SPRING	145	SMQA1076	016 631 0055 3	FRAME, HOLDER				
102	SMQA1045	001 270 1745 8	MAGNETIC HEAD	146	SMQA1025	016 718 3349 0	LEVER				
103	SMQA1090	016 630 1782 0	PLATE	147	SMQA1129	016 712 0357 2	ROD				
104	SMQA1047	016 641 0257 9	GUIDE	148	SMQA1079	016 640 0487 2	CAP				
105	SMQA1048	001 036 0036 2	PHOTO ELECTRIC TRANSDUCER	149	SMQA1080	016 717 0258 9	ARM				
106	SMQA1049	016 726 0878 6	COIL SPRING	150	SMQA1081	016 717 0259 8	ARM				
107	SMQA1050	016 726 0879 5	COIL SPRING	151	SMQA1082	016 726 0884 8	COIL SPRING				
108	SMQA1051	016 630 1779 5	PLATE	152	SMQA1083	016 726 0886 6	COIL SPRING				
109	SMQA1004	016 726 0826 8	SPRING	153	SMQA1127	016 632 1867 6	ANGLE				
110	SMQA1005	016 740 0114 1	ROLLER	154	SMQA1128	016 632 1865 8	ANGLE				
111	SMQA1006	016 726 0825 9	SPRING	155	SMQA1133	016 726 0935 4	COIL SPRING				
112	SMQA1052	016 740 0121 2	ROLLER	156	SMQA1131	016 718 3378 5	LEVER				
113	SMQA1053	016 726 0880 2	COIL SPRING	157	SMQA1135	016 643 1021 3	SPACER				
114	SMQA1054	016 630 1780 2	PLATE	158	SMQA1119	016 717 0262 3	ARM				
115	SMQA1013	016 913 0004 5	REEL	159	SMQA1120	016 726 0933 6	COIL SPRING				
116	SMQA1026	016 913 0003 6	REEL	160	SMQA1130	016 712 0355 3	ROD				
117	SMQA1009	016 643 0966 7	SPACER	161	SMQA1134	016 726 0934 5	COIL SPRING				
118	SMQA1055	016 717 0257 0	ARM	162	SMQA1132	016 718 3377 6	LEVER				
119	SMQA1012	016 726 0835 7	SPRING	163	SMQA1137	016 601 0614 2	SHIELD PLATE				
120	SMQA1056	016 718 3358 9	LEVER	164	SJT30640LX-V	003 410 6149 8	CONNECTOR				
121	SMQA1057	016 713 0364 8	SHAFT	164	SJT30840LX-V	003 410 5998 9	LUG TERMINAL				
122	SMQA1021	016 643 0965 8	SPACER	SCREWS, WASHERS & NUTS							
123	SMQA1041	001 035 0392 0	PHOTO ELECTRIC TRANSDUCER	N51	SMQA1092	005 500 7744 4	SCREW				
124	SMQA1022	016 643 0964 9	SPACER	N52	SMQA1043	005 500 7741 7	SCREW				
125	SMQA1122	016 630 1806 9	CHASSIS	N53	SMQA1093	005 500 7745 3	SCREW				
126	SMQA1061	016 742 0039 1	IDLER PULLEY	N54	SMQA1046	005 507 1969 8	NUT				
127	SMQA1024	016 726 0834 8	SPRING	N55	XTN2*13C	005 501 3505 8	TAPPING SCREW				
128	SMQA1062	016 726 0881 1	COIL SPRING	N56	XTS3*6B	005 501 0697 7	SCREW				
129	SMQA1029	016 640 0459 6	CAP	N57	SMQA1091	016 862 1061 4	INDICATION PLATE, LABEL				
130	SMQA1063	016 630 1783 9	PLATE	N58	SMQA1010	016 765 0056 7	REEL TABLE				
131	SMQA1064	016 726 0882 0	COIL SPRING	N59	SMQA1014	016 641 0246 2	SLIDER				
132	SMQA1066	016 756 0085 3	WHEEL	N60	SMQA1007	016 862 1041 8	INDICATION PLATE, LABEL				
133	SMQA1096	016 756 0086 2	WHEEL	N61	XTN3*10B	005 501 0341 2	SCREW				
134	SMQA1123	016 745 0226 9	GEAR	N62	XTN3*4F	005 501 0412 4	TAPPING SCREW				
135	SMQA1097	016 643 1004 4	SPACER	N63	XYN26+C3	005 503 0738 5	SCREW				
136	SMQA1068	016 650 5303 9	BRACKET	N64	XTN2*7C	005 501 3506 7	TAPPING SCREW				
137	SMQA1069	016 718 3359 8	LEVER	N65	SMQA1031	005 513 4185 4	WASHER				
138	SMQA1070	003 454 0638 6	PLUNGER	N66	XTN26+6B	005 501 0314 5	SCREW				
139	SMQA1071	016 643 0989 0	WASHER	N67	XTN26+8B	005 501 0320 7	TAPPING SCREW				
140	SMQA1126	016 650 5351 1	ANGLE	N68	XYN26+C45	005 503 0928 1	SCREW				
141	SMQA1073	016 718 3360 5	LEVER	N69	XYN26+C6	005 503 0554 1	SMALL SCREW				
142	SMQA1124	016 754 0077 3	ANGULAR BELT	N70	XTS2*4B	005 501 0643 1	SCREW				
143	SMQA1125	002 310 2495 4	DC MOTOR	N71	XTN3*5F	005 501 3502 1	TAPPING SCREW				
144	SMQA1036	002 310 2270 9	DC MOTOR	N72	SMQA1136	005 500 7943 9	SCREW				

■ RESISTORS & CAPACITORS

Notes: * Important safety notice:

Components identified by Δ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.

- * Bracketed indications in Ref. No. columns specify the area.

Parts without these indications can be used for all areas.

Numbering System of Resistor

Example

ERD	25	F	J	102
Type	Wattage	Shape	Tolerance	Value
ERX	2	AN	J	471
Type	Wattage	Shape	Tolerance	Value 47×10^{-3} (ohm)

Numbering System of Capacitor

Example

ECKD	1H	102	Z	F
Type	Voltage	Value	Tolerance	Peculiarity
ECEA	50	M		330
Type	Voltage	Peculiarity		Value
				(33x10 ⁹ microfarad)

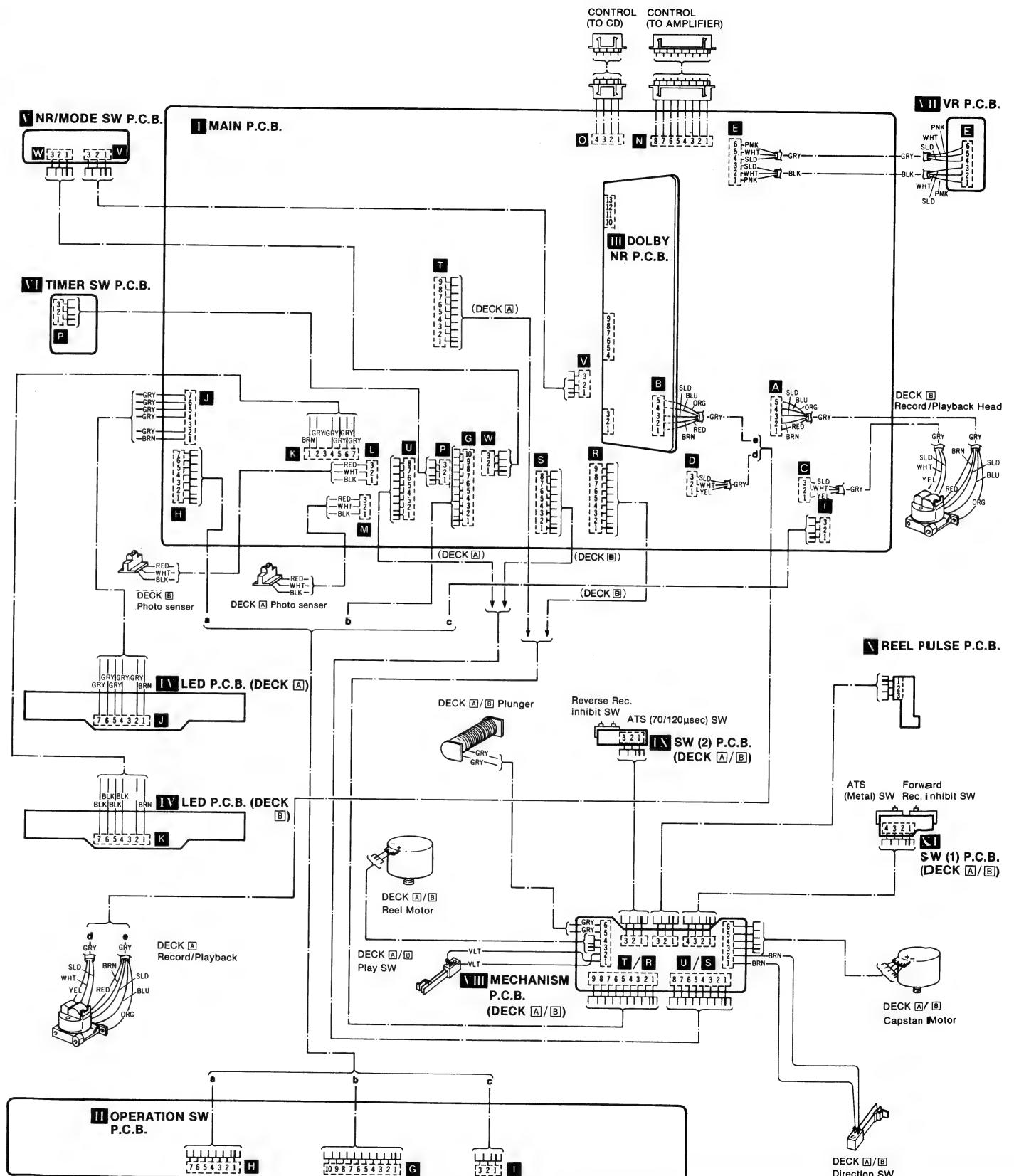
Resistor Type	Wattage	Tolerance
ERD : Carbon	10 : 1/8W	J : ±5%
ERG : Metal Oxide	12 : 1/2W	F : ±1%
ERX : Metal Film	25 : 1/4W	G : ±2%
ERQ : Fuse Type Metal	1A : 1W	K : ±10%
ERD [] L : Carbon (chip)	18 : 1/8W	
ERO [] K : Metal Film (chip)	S2 : 1/4W	
ERC : Solid	S1 : 1/2W	
	2F : 1/4W	
	50 : 1/2W	
	2A : 2W	

Capacitor Type	Voltage	Tolerance
ECE : Electrolytic	0J : 6.3V	C : $\pm 0.25\text{pF}$
ECCD : Ceramic	1A : 10V	J : $\pm 5\%$
ECKD : Ceramic	1C : 16V	K : $\pm 10\%$
ECQM : Polyester	1E : 25V	Z : $\pm 80\%$
	1H : 50V	-20%
ECQP : Polypropylene	1V : 35V	P : $\pm 100\%$
	50 : 50V	-0%
ECG : Ceramic	05 : 50V	M : $\pm 20\%$
ECEA□□□N: Non Polar	2H : 500V	
Electrolytic	2A : 100V	D : $\pm 0.5\text{pF}$
QCU□ : Ceramic (Chip Type)	1 : 100V	G : $\pm 2\%$
ECUX : Ceramic (Chip Type)	KC : 400V AC	
ECF : Semiconductor	KC : 125VAC (UL)	
EECW : Liquid electrolyte double layer capacitor	1J : 63V	

Ref. No.	Part No.	Part Code	Ref. No.	Part No.	Part Code	Ref. No.	Part No.	Part Code
RESISTORS								
R1, R2	ERDS2TJ101	001 152 2421 0	R107, R108	ERDS2TJ154	001 152 2427 4	EK, XL		
R3, R4	ERDS2TJ101	001 152 2421 0	R111, R112	ERDS2TJ472	001 152 2362 4	R608	ERDS1FJ150	001 152 2617 0
R5, R6	ERDS2TJ225	001 152 3149 3	R113, R114	ERDS2TJ472	001 152 2362 4	E, EG, EH, XA,		
R7, R8	ERDS2TJ225	001 152 3149 3	R115, R116	ERDS2TJ272	001 152 2354 4	XB		
R9, R10	ERDS2TJ101	001 152 2421 0	R117, R118	ERDS2TJ272	001 152 2354 4	R608	ERD2FCJ6R8	001 152 2481 8
R11, R12	ERDS2TJ101	001 152 2421 0	R301, R302	ERDS2TJ1R0	001 152 2419 4	EK, XL		
R13, R14	ERDS2TJ820	001 152 2453 2	R303	ERDS2TJ473	001 152 2363 3	R609	ERDS2TJ270	001 152 2434 5
R15, R16	ERDS2TJ332	001 152 2357 1	R304	ERDS2TJ683	001 152 2450 5	E, EG, EH, XA,		
R17, R18	ERDS2TJ272	001 152 2354 4	R305	ERDS2TJ473	001 152 2363 3	XB, PA, PE		
R19, R20	ERDS2TJ152	001 152 2350 8	R306	ERDS2TJ683	001 152 2450 5	R609	ERD2FCG270	001 152 2725 7
R21, R22	ERDS2TJ272	001 152 2354 4	R307, R308	ERDS2TJ100	001 152 2420 1	EK, XL		
R23, R24	ERDS2TJ223	001 152 2432 7	R309, R310	ERDS2TJ100	001 152 2420 1	R610	ERDS2TJ102	001 152 2346 4
R25, R26	ERDS2TJ472	001 152 2362 4	R311, R312	ERDS2TJ561	001 152 2364 2	R611	ERDS1FJ560	001 152 2635 8
R27, R28	ERDS2TJ183	001 152 2429 2	R313	ERDS2TJ331	001 152 2356 2	EK, XL		
R29, R30	ERDS2TJ225	001 152 3149 3	R314	ERDS2TJ221	001 152 2431 8	R611	ERDS2TJ270	001 152 2434 5
R31, R32	ERDS2TJ223	001 152 2432 7	R315	ERDS2TJ222	001 152 2353 5	E, EG, EH, XA,		
R33, R34	ERDS2TJ472	001 152 2362 4	R316	ERDS2TJ391	001 152 2360 6	XB, PA, PE		
R35, R36	ERDS2TJ222	001 152 2353 5	R317, R318	ERDS2TJ683	001 152 2450 5	R612	ERDS1FJ560	001 152 2635 8
R37, R38	ERDS2TJ330	001 152 2355 3	R319	ERDS2TJ221	001 152 2431 8	EK, XL		
R39, R40	ERDS2TJ472	001 152 2362 4	R320	ERDS2TJ681	001 152 2449 8	R612, R613	ERDS2TJ270	001 152 2434 5
R41, R42	ERDS2TJ223	001 152 2432 7	R321	ERDS2TJ331	001 152 2356 2	E, EG, EH, XA,		
R43, R44	ERDS2TJ102	001 152 2346 4	R322	ERDS2TJ681	001 152 2449 8	XB, PA, PE		
R45, R46	ERDS2TJ332	001 152 2357 1	R401, R402	ERDS2TJ242	001 152 3150 0	R614	ERDS2TJ270	001 152 2434 5
R47, R48	ERDS2TJ472	001 152 2362 4	R403, R404	ERDS2TJ562	001 152 2445 2	E, EG, EH, XA,		
R49, R50	ERDS2TJ332	001 152 2357 1	R405, R406	ERDS2TJ332	001 152 2357 1	XB, PA, PE		
R51, R52	ERDS2TJ472	001 152 2362 4	R407, R408	ERDS2TJ102	001 152 2346 4	R615	ERDS2TJ561	001 152 2364 2
R53, R54	ERDS2TJ102	001 152 2346 4	R409, R410	ERDS2TJ333	001 152 2358 0	R616, R617	ERQ14LKR22	001 190 0625 4
R55, R56	ERDS2TJ330	001 152 2355 3	R411, R412	ERDS2TJ823	001 152 2456 9	EK, XL		
R57, R58	ERDS2TJ472	001 152 2362 4	R413, R414	ERDS2TJ471	001 152 2361 5	R618	ERQ14LKR22	001 190 0625 4
R59, R60	ERDS2TJ222	001 152 2353 5	R415, R416	ERDS2TJ512	001 152 2596 8	EK, XL		
R61, R62	ERDS2TJ103	001 152 2347 3	R417, R418	ERDS2TJ683	001 152 2450 5	R801	ERG1ANJ390	001 151 0066 2
R63, R64	ERDS2TJ103	001 152 2347 3	R419, R420	ERDS2TJ222	001 152 2353 5	E, EG, EH, XA,		
R65, R66	ERDS2TJ152	001 152 2350 8	R421, R422	ERDS2TJ823	001 152 2456 9	XB		
R67, R68	ERDS2TJ562	001 152 2445 2	R423, R424	ERDS2TJ331	001 152 2356 2	R801	ERG3ANJ390	001 151 0238 0
R69, R70	ERDS2TJ472	001 152 2362 4	R425, R426	ERDS2TJ101	001 152 2421 0	EK, XL		
R73, R74	ERDS2TJ223	001 152 2432 7	R601	ERDS2TJ103	001 152 2347 3	R802	ERG1ANJ390	001 151 0066 2
R77, R78	ERDS2TJ123	001 152 2424 7	R602	ERDS2TJ182	001 152 2352 6	E, EG, EH, XA,		
R81, R82	ERDS2TJ222	001 152 2353 5	R605	ERDS2TJ471	001 152 2361 5	XB, PA, PE		
R84	ERDS2TJ154	001 152 2427 4	R606	ERDS2TJ102	001 152 2346 4	R802	ERG3ANJ390	001 151 0238 0
R86	ERDS2TJ223	001 152 2432 7	R607	ERDS1FJ4R7	001 152 2631 2	EK, XL		
R88	ERDS2TJ473	001 152 2363 3	E, EG, EH, XA,			R803, R804	ERDS2TJ391	001 152 2360 6
		XB, PA, PE	R607	ERQ14LKR7P	001 151	R805, R806	ERDS2TJ225	001 152 3149 3
						R807, R808	ERDS2TJ103	001 152 2347 3

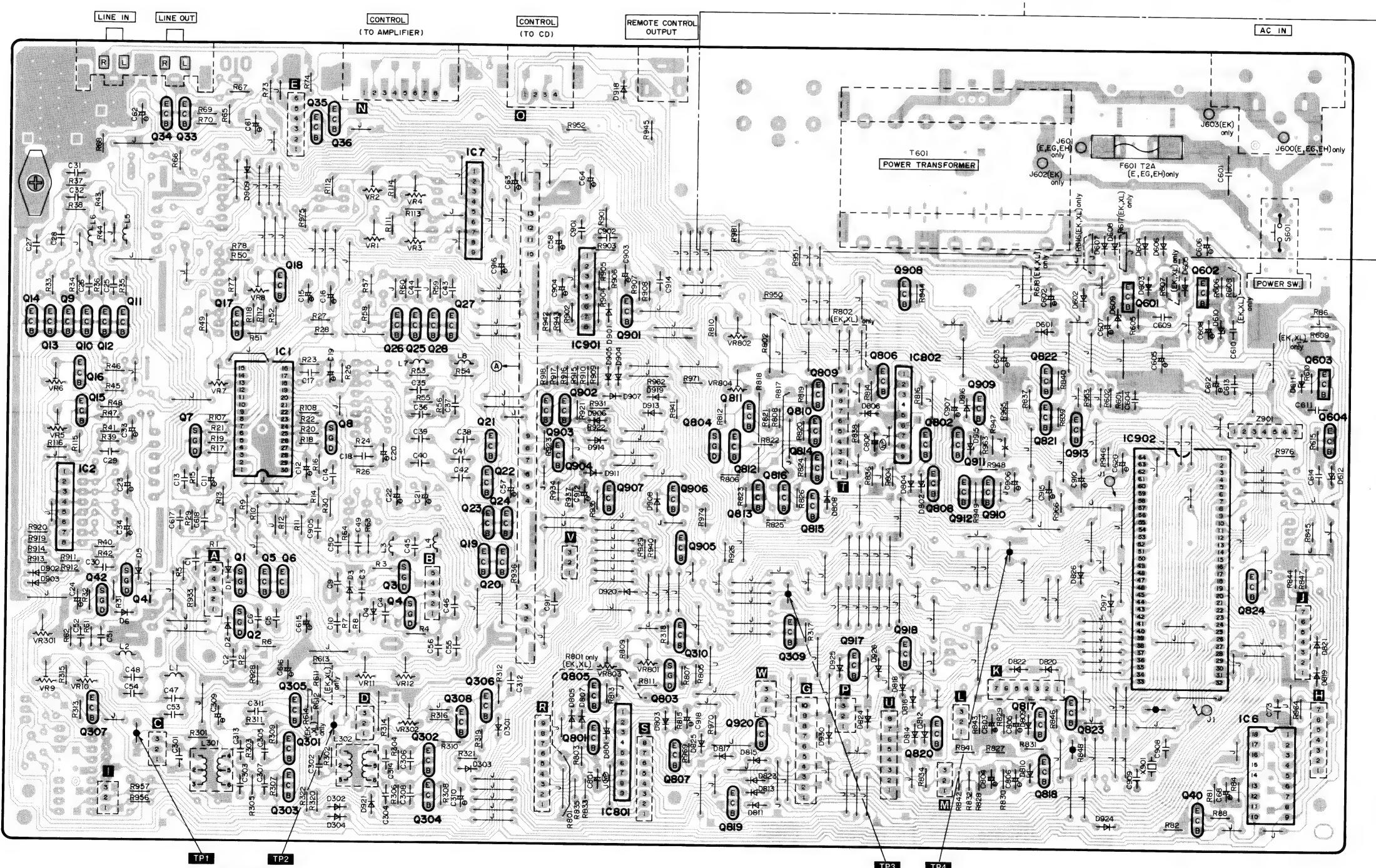
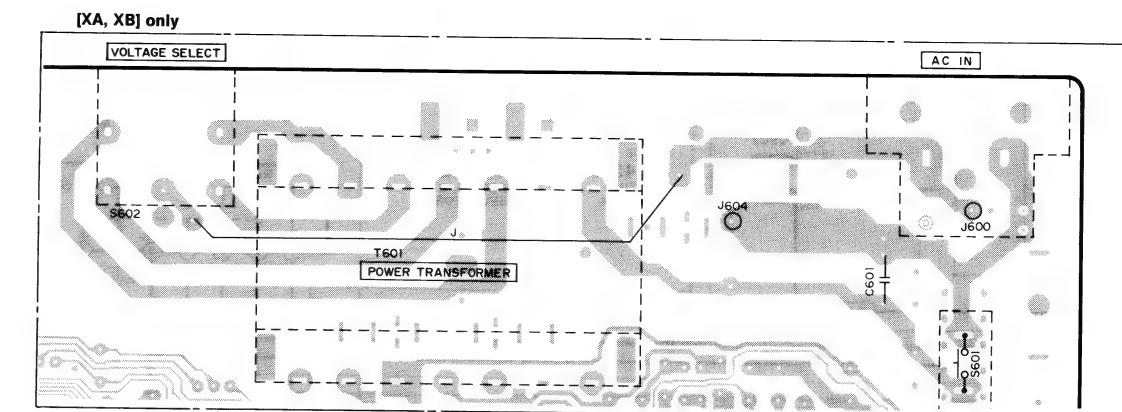
Ref. No.	Part No.	Part Code	Ref. No.	Part No.	Part Code	Ref. No.	Part No.	Part Code	
R809, R810	ERDS2TJ223	001 152 2432 7	R947	ERDS2TJ103	001 152 2347 3	C305, C306	ECCR1E222KAY	001 108 0942 8	
R811, R812	ERDS2TJ103	001 152 2347 3	R948	ERDS2TJ471	001 152 2361 5	C307, C308	ECCR1E222KAY	001 108 0942 8	
R813, R814	ERDS2TJ104	001 152 2348 2	R949	ERDS2TJ103	001 152 2347 3	C309	ECEA1CU331	001 120 3200 5	
R815, R816	ERDS2TJ821	001 152 2454 1	R950, R951	ERDS2TJ102	001 152 2346 4	C310	ECEA1EU221	001 120 2638 7	
R817, R818	ERX2ANJ220	001 151 0140 9	R952, R953	ERDS2TJ102	001 152 2346 4	C311, C312	ECKD1H103PF	001 103 1449 7	
R819, R820	ERDS2TJ104	001 152 2348 2	R956, R957	ERDS2TJ331	001 152 2356 2	C313, C314	ECCR1E682KAY		
R821, R822	ERDS2TJ821	001 152 2454 1	R962	ERDS2TJ22	001 152 2353 5	C401, C402	ECD1H820K	001 103 0703 6	
R823, R824	ERDS2TJ104	001 152 2348 2	R963	ERDS2TJ103	001 152 2347 3	C403, C404	ECQB1H472JZ	001 106 3380 8	
R825, R826	ERDS2TJ821	001 152 2454 1	R964	ERDS2TJ331	001 152 2356 2	C405, C406	ECEA1CKS100	001 120 2600 7	
R827, R828	ERDS2TJ103	001 152 2347 3	R965	ERDS2TJ473	001 152 2363 3	C407, C408	ECQM1H473JZ	001 106 0810 9	
R829, R830	ERDS2TJ102	001 152 2346 4	R966, R969	ERDS2TJ103	001 152 2347 3	C409, C410	ECQV1H224JZ	001 106 3625 6	
R831, R832	ERDS2TJ104	001 152 2348 2	R970	ERDS2TJ102	001 152 2346 4	C411, C412	ECAG25ER68L	001 120 1109 7	
R833, R834	ERDS2TJ223	001 152 2432 7	R971	ERDS2TJ473	001 152 2363 3	C413, C414	ECQB1H103JZ	001 106 3225 8	
R835, R836	ERDS2TJ681	001 152 2449 8	R974, R975	ERDS2TJ104	001 152 2348 2	C415, C416	ECQB1H472JZ	001 106 3380 8	
R837, R838	ERDS2TJ682	001 152 2365 1	R976	ERDS2TJ561	001 152 2364 2	C417, C418	ECEA1CKS100	001 120 2600 7	
R839, R840	ERDS2TJ223	001 152 2432 7	R981	ERDS2TJ473	001 152 2363 3	C419, C420	ECQM1H473JZ	001 106 0810 9	
R841, R842	ERDS2TJ681	001 152 2449 8				C421, C422	ECQV1H224JZ	001 106 3625 6	
R843, R844	ERDS2TJ821	001 152 2454 1				C423, C424	ECAG25ER68L	001 120 1109 7	
R845, R846	ERDS2TJ102	001 152 2346 4				C425, C426	ECKD1H152KB	001 103 1467 5	
R847, R848	ERDS2TJ102	001 152 2346 4				C427, C428	ECKD1H122KB	001 103 1459 5	
R901	ERDS2TJ272	001 152 2354 4				C601	△	ECKDK103PF2	001 103 3734 7
R902	ERDS2TJ101	001 152 2421 0				C602		ECEA1EU102	001 120 2705 9
R903	ERDS2TJ223	001 152 2432 7				C603		ECEA1VU222	001 120 3272 9
R904	ERDS2TJ393	001 152 2440 7				C604		ECKD1H103PF	001 103 1449 7
R905	ERDS2TJ472	001 152 2362 4				C605		ECEA1ES332	001 120 3025 2
R906	ERDS2TJ102	001 152 2346 4				C606		ECEA1EU102	001 120 2705 9
R907, R908	ERDS2TJ473	001 152 2363 3				C607, C608		ECEA1AU221	001 120 3131 1
R909	ERDS2TJ272	001 152 2354 4				C609, C610		ECKD1H103PF	001 103 1449 7
R910, R911	ERDS2TJ103	001 152 2347 3				C611		ECKD1H103PF	001 103 1449 7
R912	ERDS2TJ272	001 152 2354 4				C612		ECEA1CKS100	001 120 2600 7
R913	ERDS2TJ332	001 152 2357 1				C613, C614		ECKD1H103PF	001 103 1449 7
R914, R915	ERDS2TJ103	001 152 2347 3				C615		ECEA10V1000	001 120 3028 9
R916	ERDS2TJ332	001 152 2357 1				C616		ECEA0JU222	001 120 3161 5
R917	ERDS2TJ103	001 152 2347 3				C617, C618		ECKD1H103PF	001 103 1449 7
R918, R919	ERDS2TJ563	001 152 2446 1				C620		ECEA1HK010	001 120 0341 5
R920	ERDS2TJ103	001 152 2347 3				C801, C802		ECEA1CN100S	001 120 0233 8
R921, R922	ERDS2TJ473	001 152 2363 3				C803, C804		ECEA1HK010	001 120 0341 5
R923	ERDS2TJ393	001 152 2440 7				C805, C806		ECEA1EK4R7	001 120 0294 5
R926	ERDS2TJ152	001 152 2350 8				C807		ECQB1H822JZ	001 106 3383 5
R928	ERDS2TJ103	001 152 2347 3				C901		ECCD1H470K	001 103 0627 1
R929	ERDS2TJ562	001 152 2445 2				C902		ECEA1HK010	001 120 0341 5
R931	ERDS2TJ103	001 152 2347 3				C903		ECEA1CKS100	001 120 2600 7
R933	ERDS2TJ223	001 152 2432 7				C904		ECKD1H103PF	001 103 1449 7
R934	ERDS2TJ103	001 152 2347 3				C905		ECEA1EK4R7	001 120 0294 5
R935	ERDS2TJ472	001 152 2362 4				C906		ECEA1AU221	001 120 3131 1
R936	ERDS2TJ103	001 152 2347 3				C907		ECCD1H330K	001 103 0567 6
R937	ERDS2TJ223	001 152 2432 7				C908, C909		ECEA1EK3R3	001 120 0292 7
R940	ERDS2TJ562	001 152 2445 2				C910		ECEA1CKS100	001 120 2600 7
R941, R942	ERDS2TJ103	001 152 2347 3				C912		ECKD1H103PF	001 103 1449 7
R943, R944	ERDS2TJ223	001 152 2432 7				C914		ECEA1HK010	001 120 0341 5
R945	ERDS2TJ103	001 152 2347 3				C915, C916		ECKD1H103PF	001 103 1449 7
R946	ERDS2TJ123	001 152 2424 7				C917		ECEA1CK220	001 120 0225 8
		C303, C304				C918			

WIRING CONNECTION DIAGRAM



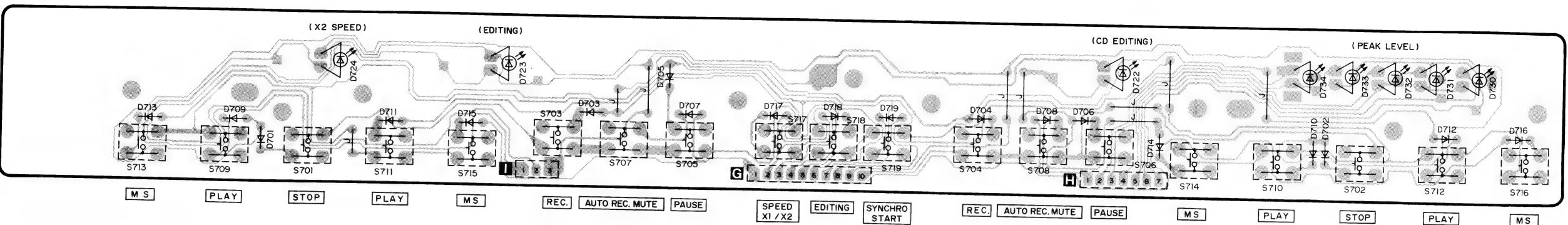
PRINTED CIRCUIT BOARDS

I MAIN P.C.B.

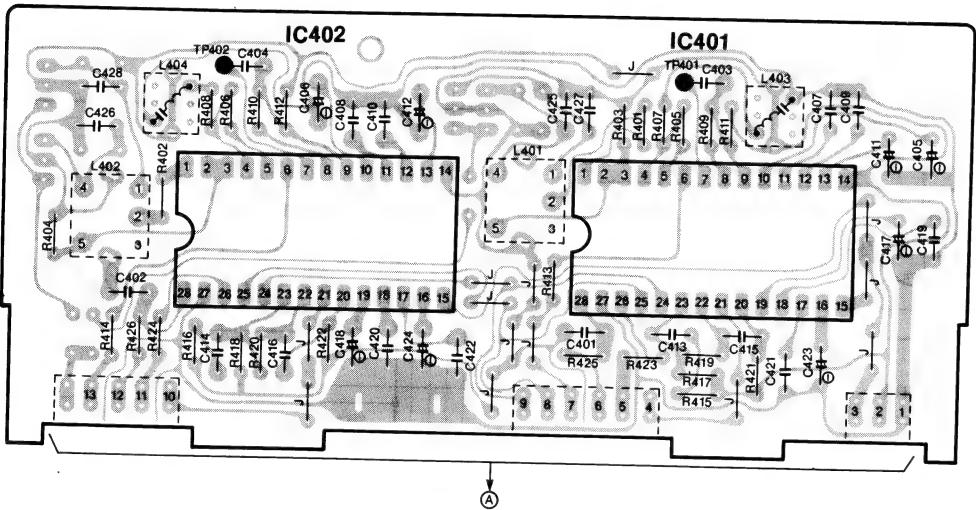


**ERASE CURRENT ADJ
TEST POINT**

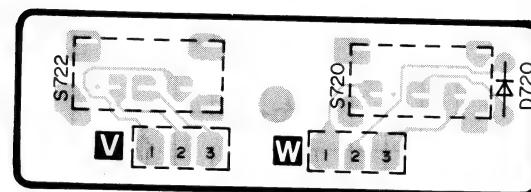
II OPERATION SW P.C.B.



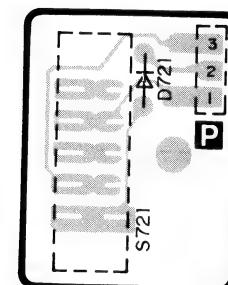
III DOLBY NR P.C.B.



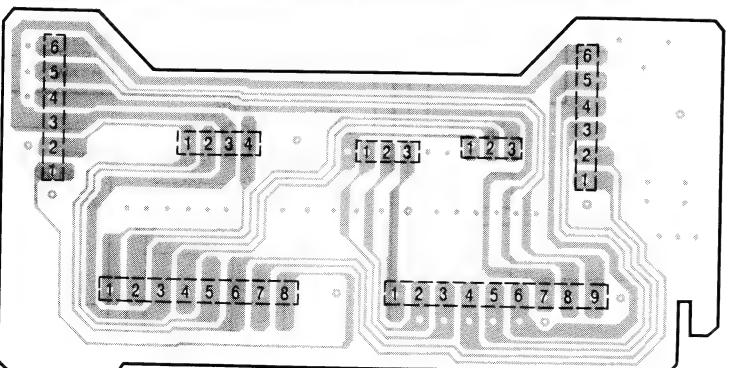
V NR/MODE SW P.C.B.



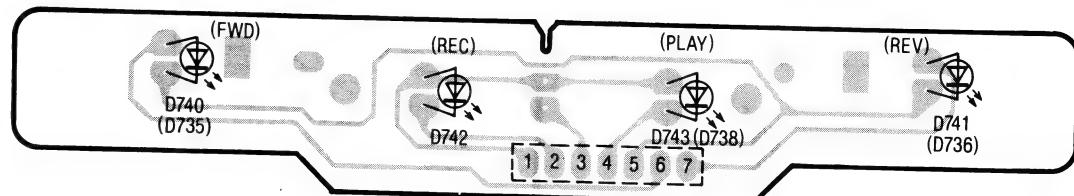
VI TIMER SW P.C.B.

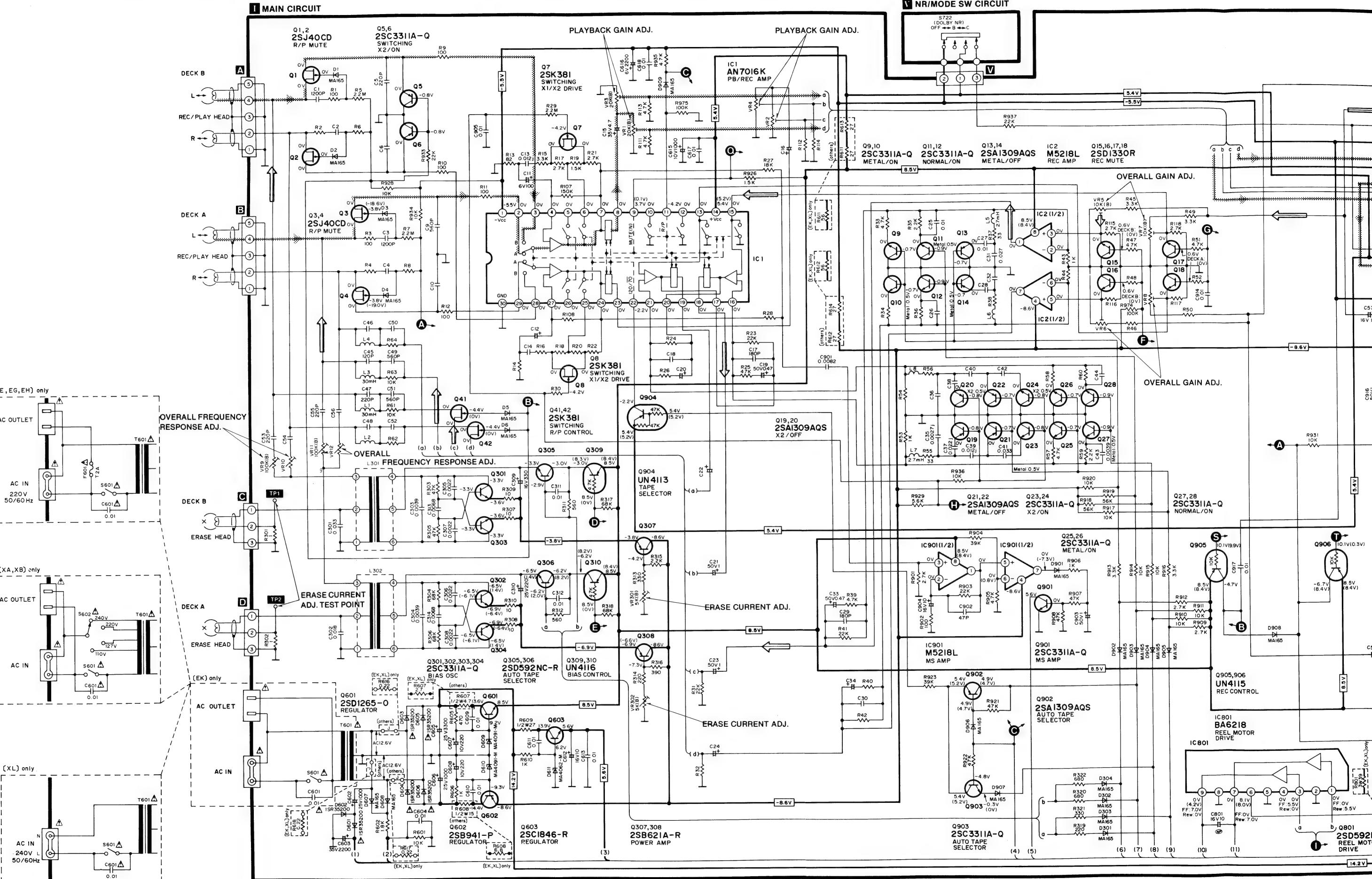


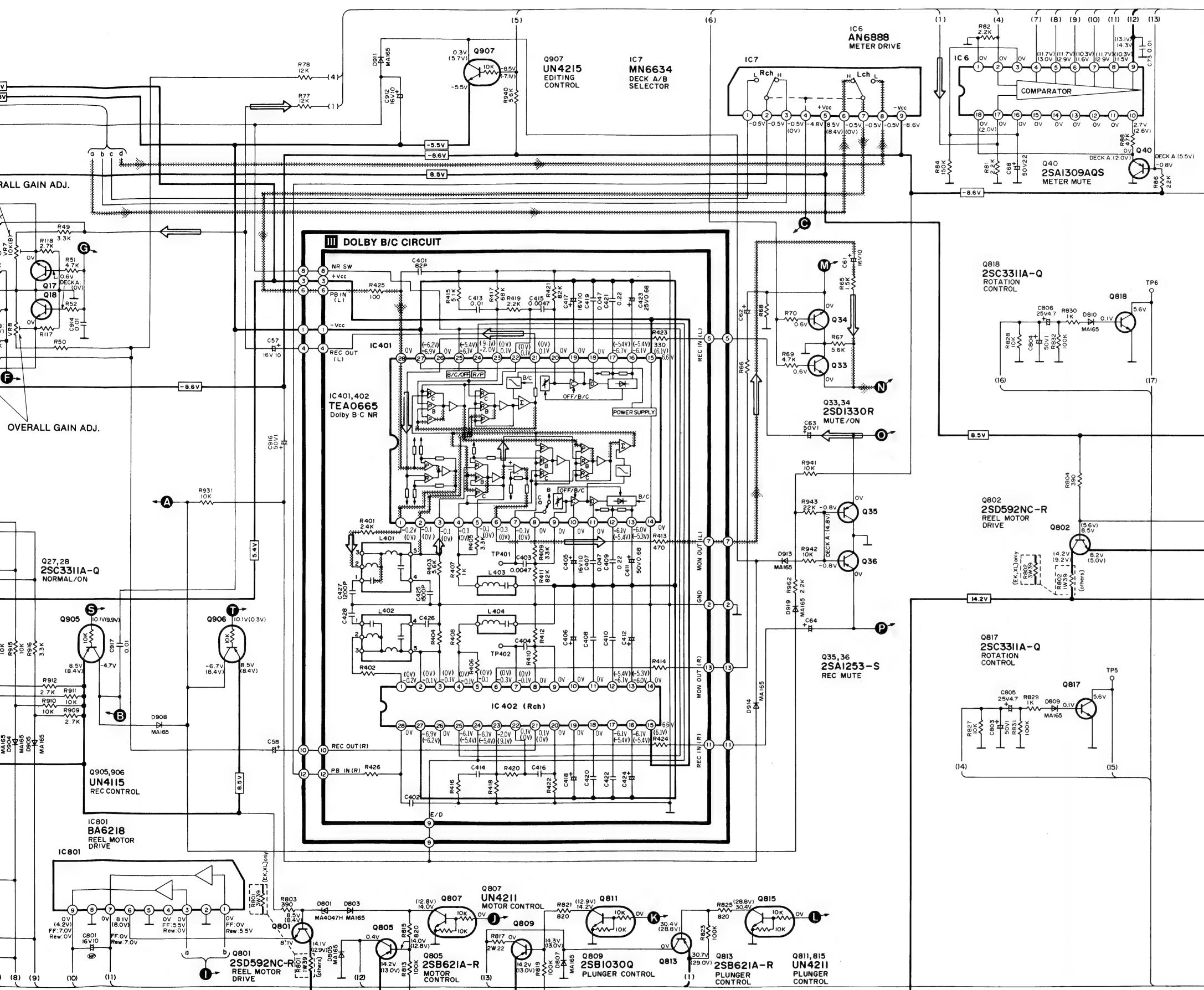
VIII MECHANISM P.C.B. (DECK A/DECK B)

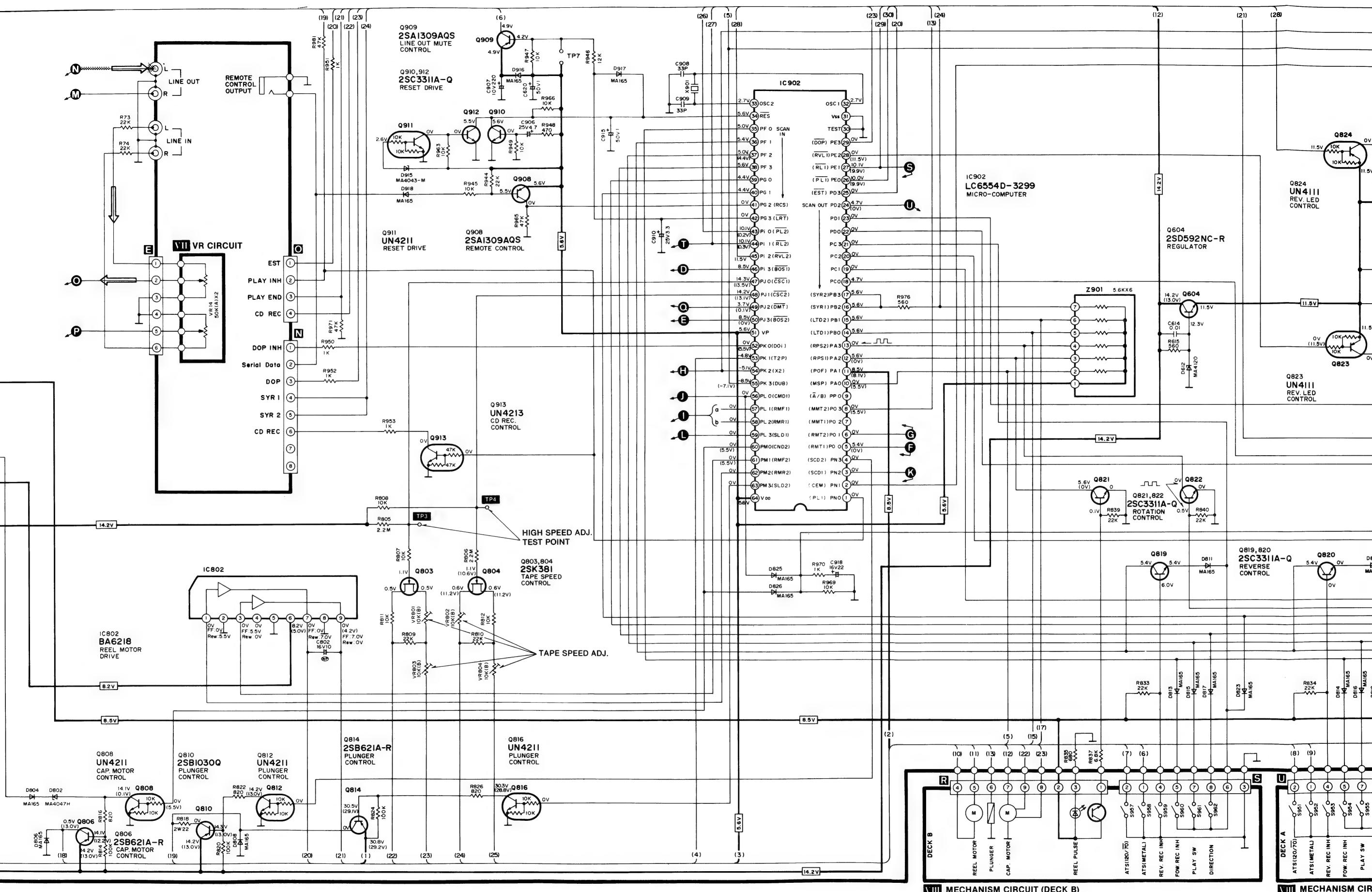


IV LED P.C.B. (DECK A/DECK B)









REPLACEMENT PARTS LIST

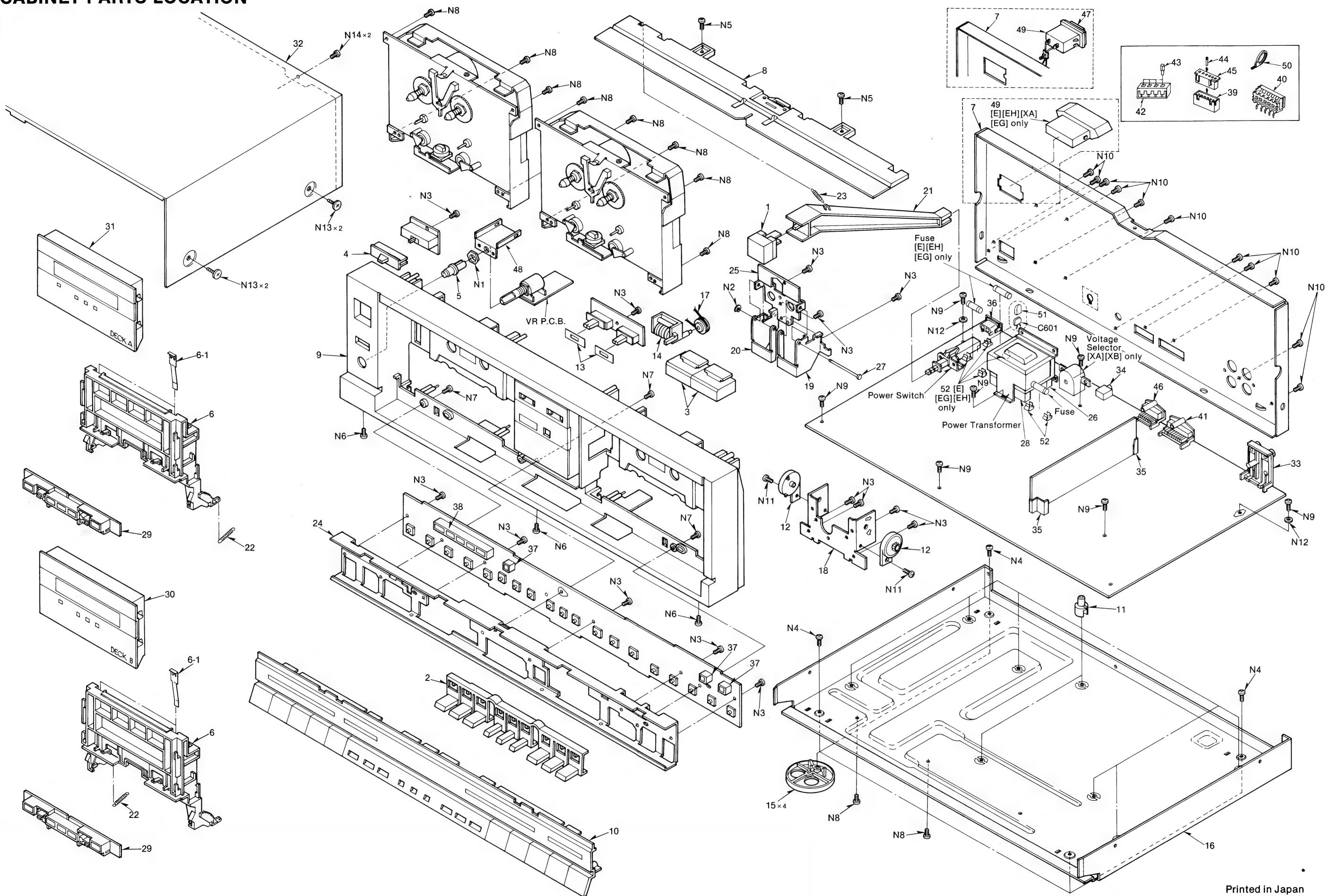
Notes: * Important safety notice:
Components identified by Δ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.

* Bracketed indications in Ref. No. columns specify the area.
Parts without these indications can be used for all areas.

Ref. No.	Part No.	Part Code	Description	Ref. No.	Part No.	Part Code	Description
INTEGRATED CIRCUITS							
IC1	AN7016K	001 061 4629 4	I.C. PB/REC AMP.	D612	MA4120	001 032 7292 0	DIODE
IC2	M5218L	001 060 3798 7	I.C. OPERATION AMP.	D701, D702	MA165	001 032 0494 0	DIODE
IC6	AN6888	001 060 7693 9	I.C. METER DRIVE	D703, D704	MA165	001 032 0494 0	DIODE
IC7	MN6634	001 061 0884 7	I.C. SWITCH	D705, D706	MA165	001 032 0494 0	DIODE
IC401, IC402	TEA0685	001 060 7933 2	I.C. DOLBY NR	D707, D708	MA165	001 032 0494 0	DIODE
IC801, IC802	BA6218	001 061 1421 0	I.C. MOTOR DRIVE	D709, D710	MA165	001 032 0494 0	DIODE
IC901	M5218L	001 060 3798 7	I.C. OPERATION AMP.	D711, D712	MA165	001 032 0494 0	DIODE
IC902	LC6554D-3299	001 061 4771 9	I.C. MICRO COMPUTER	D713, D714	MA165	001 032 0494 0	DIODE
TRANSISTORS							
Q1, Q2	2SJ40CD	001 030 2807 5	TRANSISTOR	D715, D716	MA165	001 032 0494 0	DIODE
Q3, Q4	2SJ40CD	001 030 2807 5	TRANSISTOR	D717, D718	MA165	001 032 0494 0	DIODE
Q5, Q6	2SC3311A-Q	001 030 5279 5	TRANSISTOR	D719, D720	MA165	001 032 0494 0	DIODE
Q7, Q8	2SK381	001 030 4439 1	TRANSISTOR	D721	MA165	001 032 0494 0	DIODE
Q9, Q10	2SC3311A-Q	001 030 5279 5	TRANSISTOR	D722, D723	LN89RCPP	001 032 7930 3	LED
Q11, Q12	2SC3311A-Q	001 030 5279 5	TRANSISTOR	D724, D730	LN89RCPP	001 032 7930 3	LED
Q13, Q14	2SA1309AQS	001 030 4846 0	TRANSISTOR	D731, D732	LN89RCPP	001 032 7930 3	LED
Q15, Q16	2SD1330R	001 030 2521 6	TRANSISTOR	D733, D734	LN89RCPP	001 032 7930 3	LED
Q17, Q18	2SD1330R	001 030 2521 6	TRANSISTOR	D735, D736	LN89RCPP	001 032 5729 0	LED
Q19, Q20	2SA1309AQS	001 030 4846 0	TRANSISTOR	D737	LN29RCPP	001 032 5758 5	LED
Q21, Q22	2SA1309AQS	001 030 4846 0	TRANSISTOR	D738, D740	LN39GCPP	001 032 5729 0	LED
Q23, Q24	2SC3311A-Q	001 030 5279 5	TRANSISTOR	D741	LN39GCPP	001 032 5729 0	LED
Q25, Q26	2SC3311A-Q	001 030 5279 5	TRANSISTOR	D742	LN29RCPP	001 032 5758 5	LED
Q27, Q28	2SC3311A-Q	001 030 5279 5	TRANSISTOR	D743	LN39GCPP	001 032 5729 0	LED
Q33, Q34	2SD1330R	001 030 2521 6	TRANSISTOR	D801, D802	MA4047H	001 032 8141 0	DIODE
Q35, Q36	2SA1253-S	001 030 4843 3	TRANSISTOR	D803, D804	MA165	001 032 0494 0	DIODE
Q40	2SA1309AQS	001 030 4846 0	TRANSISTOR	D805, D806	MA165	001 032 0494 0	DIODE
Q41, Q42	2SK381	001 030 4439 1	TRANSISTOR	D807, D808	MA165	001 032 0494 0	DIODE
Q301, Q302	2SC3311A-Q	001 030 5279 5	TRANSISTOR	D809, D810	MA165	001 032 0494 0	DIODE
Q303, Q304	2SC3311A-Q	001 030 5279 5	TRANSISTOR	D811, D812	MA165	001 032 0494 0	DIODE
Q305, Q306	2SD592NC-R	001 030 1759 0	TRANSISTOR	D813, D814	MA165	001 032 0494 0	DIODE
Q307, Q308	2SB621A-R	001 030 0688 6	TRANSISTOR	D815, D816	MA165	001 032 0494 0	DIODE
Q309, Q310	UN4116	001 030 4834 4	TRANSISTOR	D817, D818	MA165	001 032 0494 0	DIODE
Q601	2SD1265-0	001 030 2652 6	TRANSISTOR	D819, D820	MA165	001 032 0494 0	DIODE
Q602	2SB941-P	001 030 2696 4	TRANSISTOR	D821, D822	MA165	001 032 0494 0	DIODE
Q603	2SC1846-R	001 030 1134 7	TRANSISTOR	D823, D824	MA165	001 032 0494 0	DIODE
Q604, Q801	2SD592NC-R	001 030 1759 0	TRANSISTOR	D825, D826	MA165	001 032 0494 0	DIODE
Q803, Q804	2SD592NC-R	001 030 1759 0	TRANSISTOR	D901, D902	MA165	001 032 0494 0	DIODE
Q805, Q806	2SB621A-R	001 030 0688 6	TRANSISTOR	D903, D904	MA165	001 032 0494 0	DIODE
Q807, Q808	2SK381	001 030 4439 1	TRANSISTOR	D905, D906	MA165	001 032 0494 0	DIODE
Q811, Q812	2SA1309AQS	001 030 4846 0	TRANSISTOR	D907, D908	MA165	001 032 0494 0	DIODE
Q813, Q814	2SC3311A-Q	001 030 5279 5	TRANSISTOR	D909, D911	MA165	001 032 0494 0	DIODE
Q815, Q816	2SB621A-R	001 030 0688 6	TRANSISTOR	D913, D914	MA165	001 032 0494 0	DIODE
Q817, Q818	UN4211	001 030 4033 9	TRANSISTOR	D915	MA4043M	001 032 5574 1	DIODE
Q819, Q820	2SB1030Q	001 030 4131 8	TRANSISTOR	D916, D917	MA165	001 032 0494 0	DIODE
Q821, Q822	UN4211	001 030 4033 9	TRANSISTOR	D918, D919	MA165	001 032 0494 0	DIODE
Q823, Q824	2SB621A-R	001 030 0688 6	TRANSISTOR	D920, D921	MA165	001 032 0494 0	DIODE
Q825, Q826	UN4211	001 030 4033 9	TRANSISTOR	D924, D925	MA165	001 032 0494 0	DIODE
Q827, Q828	2SC3311A-Q	001 030 5279 5	TRANSISTOR	D926, D930	MA165	001 032 0494 0	DIODE
VARIABLE RESISTORS							
VR1, VR2	EVND4AA00B24	001 180 2244 1	20K Ω (B)	VR3, VR4	EVND4AA00B24	001 180 2244 1	20K Ω (B)
VR5, VR6	EVND4AA00B14	001 180 2242 3	10K Ω (B)	VR7, VR8	EVND4AA00B14	001 180 2242 3	10K Ω (B)
VR9, VR10	EVND4AA00B15	001 180 2243 2	100K Ω (B)	VR11, VR12	EVND4AA00B15	001 180 2243 2	100K Ω (B)
VR14	EVJRKA025A4	001 174 8992 4	INPUT LEVEL, 500K Ω (A) \times 2	VR301, VR302	EVND4AA00B53	001 180 2319 9	5K Ω (B)
VR801, VR802	EVND4AA00B14	001 180 2242 3	10K Ω (B)	VR803, VR804	EVNLCA00B14	001 180 3116 4	10K Ω (B)
COILS AND TRANSFORMERS							
L1, L2	SLQX303-1K	001 211 1756 6	CHOKE COIL	L3, L4	SLQX303-1K	001 211 1756 6	CHOKE COIL
L5, L6	SLQX272-1YT	001 211 0649 2	CHOKE COIL	L7, L8	SLQX272-1YT	001 211 0649 2	CHOKE COIL
L301, L302	SL09C19-K	001 211 2472 1	OSCILLATOR COIL	L401, L402	QLB40048	001 210 7275 9	COIL
L403, L404	ELM7Q306A	001 210 6560 1	COIL	T601	SLT5V11-S	001 202 9027 1	POWER TRANSFORMER
E, EG, EH				T601	SLT5V12-S	001 202 9028 0	POWER TRANSFORMER
EK, XL				T601	SLT5V13-S	001 202 9041 3	POWER TRANSFORMER
COMPONENT COMBINATIONS							
Z901	EXBF7E562J	001 230 1578 9	COMPONENT COMBINATION 5.6K Ω \times 6				

Ref. No.	Part No.	Part Code	Description	Ref. No.	Part No.	Part Code	Description
OSCILLATORS							
X901	SVFCSA300MG	001 241 1296 5	CERAMIC FILTER	40	SJT30340LX-V	003 410 6075 9	LUG TERMINAL
FUSES							
F601	XBAS2A2001	002 380 0410 1	FUSE, 250V, T2A	42	SJT3040LX-V	003 410 5990 7	LUG TERMINAL
E, EG, EH				41	SJS804	003 403 4910 8	CONNECTOR

CABINET PARTS LOCATION



Service Manual

Cassette Deck

Supplement

Dolby B • C NR-Equipped
Stereo Double Cassette Deck

RS-X888

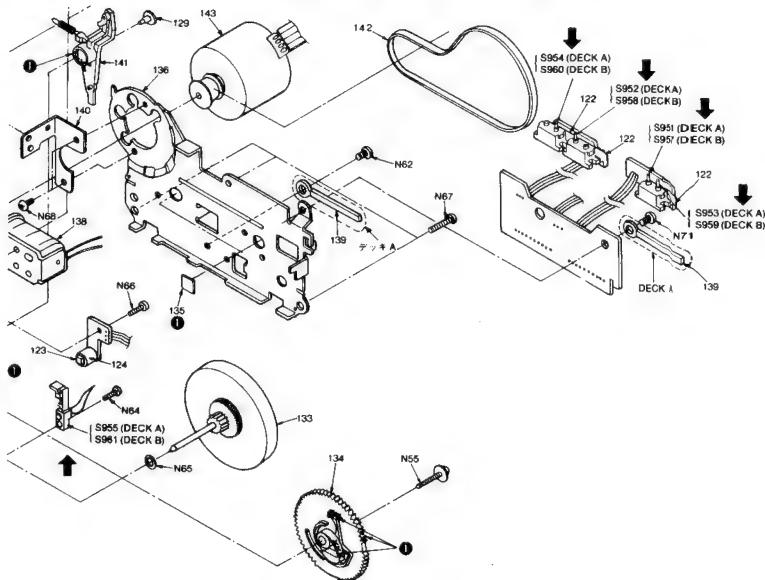
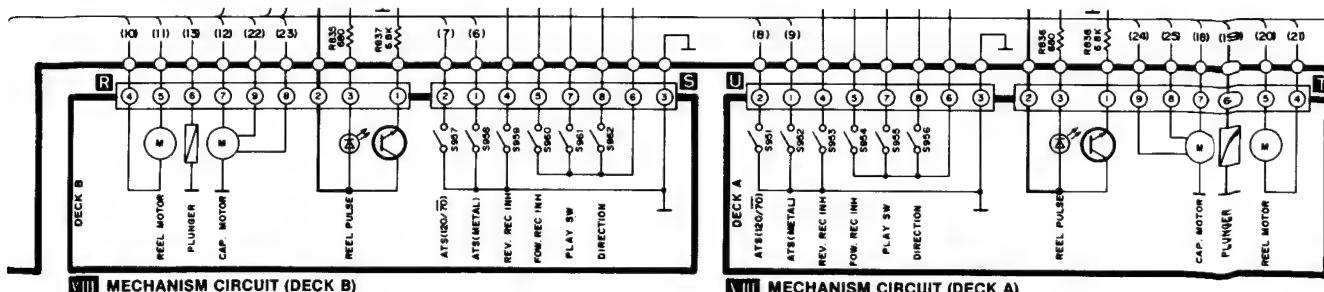
Please file and use this supplement manual together with the service manual for Model No. RS-X844, Order No. HAD8704078C8.

Note:

- Addition parts in the replacement parts list are shown by arrow (→).

ADDITION**REPLACEMENT PARTS LIST**

Ref No.	Part No.	Description
SWITCHES		
S951, 957	SMQA1058	ATS (70/120μs)
S952, 958	SMQA1059	ATS (METAL)
S953, 959	SMQA1058	REV REC
S954, 960	SMQA1040	FOW REC
S955, 961	SMQA1023	PLAY
S956, 962	SMQA1023	DIRECTION

MECHANICAL PARTS LOCATION (PAGE 16)**SCHEMATIC DIAGRAM (PAGE 30)****Technics**

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka Japan

Printed in Japan
H8711340S8

Service Manual

Cassette Deck

Supplement

Dolby B • C NR-Equipped
Stereo Double Cassette Deck

RS-X866

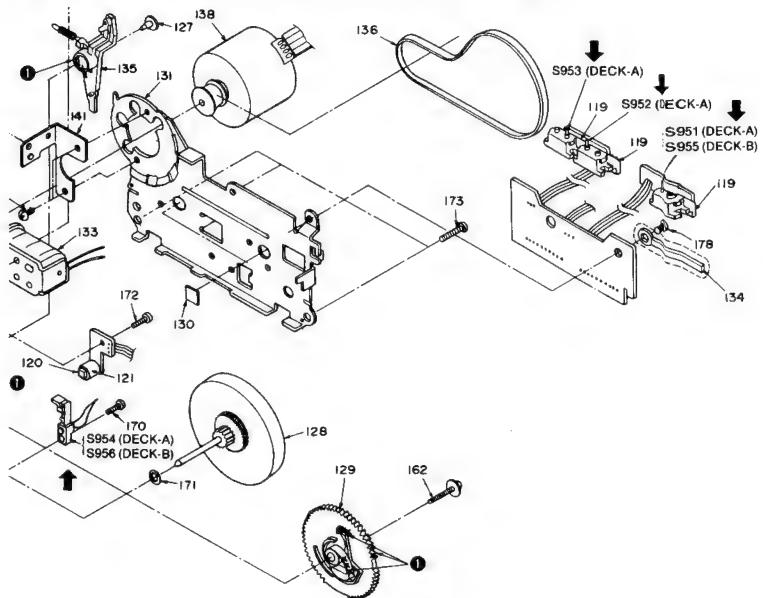
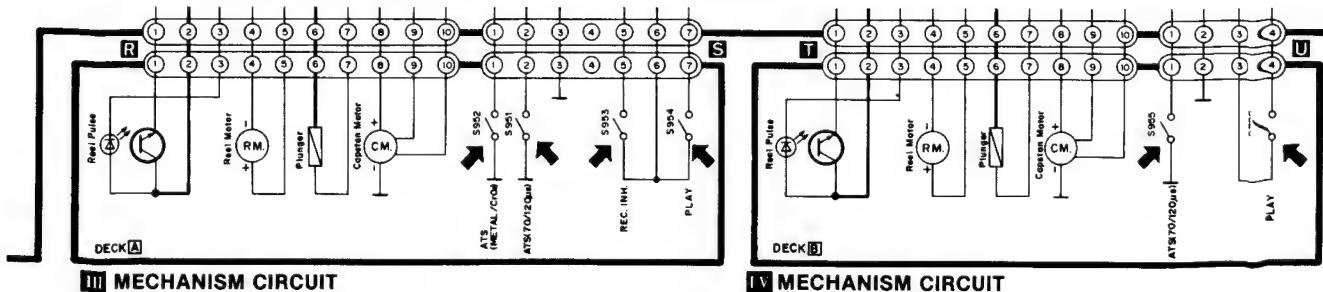
Please file and use this supplement manual together with the service manual for Model No. RS-X866, Order No. HAD8705103C8.

Note:

- Addition parts in the replacement parts list are shown by arrow (→).

ADDITION**■ REPLACEMENT PARTS LIST**

Ref No.	Part No.	Description
SWITCHES		
S951	SMQA1059	ATS (70/120μs)
S952	SMQA1059	ATS (M/cro ₂)
S953	SMQA1040	REC
S954	SMQA1023	PLAY
S955	SMQA1059	ATS (70/120μs)
S956	SMQA1023	PLAY

• MECHANICAL PARTS LOCATION (PAGE 16)**• SCHEMATIC DIAGRAM (PAGE 29)**

Technics

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka Japan

Printed in Japan
H871 106980 IM

DEUTSCH

Verwenden Sie bitte diese Broschüre Zusammen mit der Service-Anleitung für das Modell Nr. RS-X888.

MESSUNGEN UND EINSTELL METHODEN

Meßinstrumente

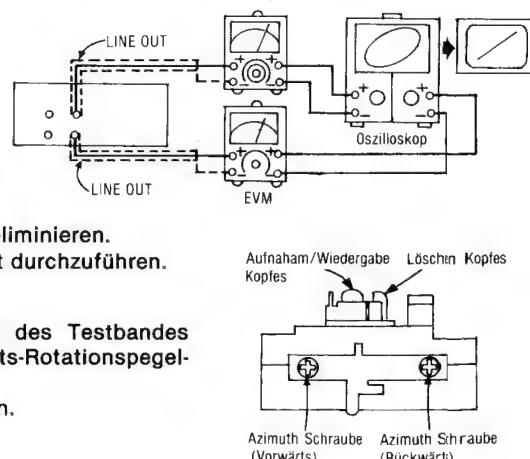
- Elektronisches Voltmeter (EVM)
- Oszilloskop
- Digitaler Frequenzmesser
- Audiofrequenz-Oszillator
- Dämpfungswiderstand
- Gleichstrom-Voltmeter
- Widerstand (600Ω)

Kopfazimut-Justierung

1. Den Azimut-Justierungsteil (8kHz, -20dB) des Testbandes (QZZCFM) wiedergeben und die Winkel-justierungs-Einstellschraube so verstetzen, daß der Ausgang vom linken und rechten Kanal maximal wird. (Wenn die Justierpositionen für den linken und rechten Kanal verschieden sind, ist eine Position zu finden, wo der Ausgang des linken und rechten Kanals ausgelichen ist, und dann ist die Justierung durchzuführen.)
2. Gleichzeitig eine Lissajous-Wellenform ziehen und Phasenablenkung eliminieren.
3. Dieselbe Justierung ist auch für die Rückwärts-Wiedergabe-Betriebsart durchzuführen.

Prüfung des Vorwärts-und Rückwärts-Rotationspegel-Unterschieds.

4. Den für Wiedergabe-Verstärkungsgrad justierten Teil (315Hz, 0dB) des Testbandes (QZZCFM) wiedergeben und dann prüfen, ob der Vorwärts-und Rückwärts-Rotationspegel-Unterschied innerhalb 1dB liegt.
5. Nach der Justierung ist die Winkel-Justierschraube mit Lack zu sichern.



Bandgeschwindigkeits-Justierung (DECK A, B)

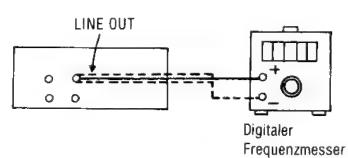
— Schneller Bandlauf —

1. Stellen Sie den Bandgeschwindigkeitswählschalter auf "X2" und erden Sie Deck B an TP3 und Deck A an TP4.
2. Spielen Sie den Mittelteil des Testbandes (QZZCWAT) ab.
3. Justieren Sie VR803 von Deck B und VR804 von Deck A so, daß die Abgabewerte innerhalb der Standardwerte liegen.

— Normaler Bandlauf —

4. Stellen Sie den Bandgeschwindigkeitswählschalter auf "X1" und unterbrechen Sie Deck B in TP3 und Deck A in TP4.
5. Spielen Sie den Mittelteil des Testbandes (QZZCWAT) ab.
6. Justieren Sie VR801 von Deck B und VR802 von Deck A so, daß die Abgabewerte innerhalb der Standardwerte liegen.

Standardwert: 3000±15Hz (Normal), 6000±30Hz (Schnell)



Wiedergabe-Frequenzgang

- Den Wiedergabe-Frequenzgangteil (315Hz, 12,5kHz~63Hz, -20dB) des Testbandes (QZZCFM) wiedergeben.
- Überprüfen, ob der Frequenzgang innerhalb des in Abb. 2 für den linken und rechten Kanal gezeigten Bereichs liegt.

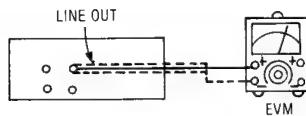


Abb. 1

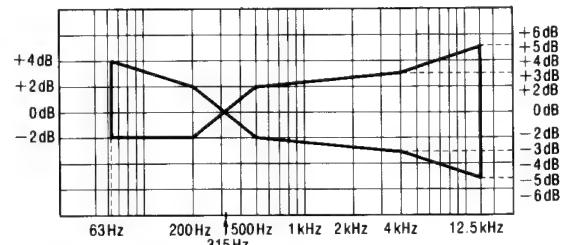


Abb. 2

Justierung des Wiedergabe-Verstärkungsgrades (DECK A, B)

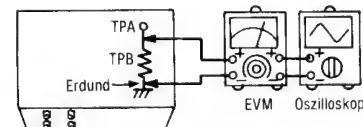
- Der Testaufbau ist in Abb. 1 gezeigt.
- Den für den Wiedergabe-Verstärkungsgrad justierten Teil (315Hz, 0dB) des Testbandes (QZZCFM) wiedergeben.
- Den VR1 (linker Kanal) [[VR2 (rechter Kanal)]] für Deck B und den VR3 (linker Kanal) [[VR4 (rechter Kanal)]] für Deck A so justieren, daß die Ausgangsleistung dem Standard-Wert entspricht.

Standard-Wert: $0,4\text{V} \pm 0,5\text{dB}$

Löschenstrom-Justierung (DECK A, B)

- Eine Reineisenband-Cassette einsetzen.
- Die Aufnahmetaste und die Pausentaste drücken.
- Den VR301 (DECK B) [[VR302 (DECK A)]] so justieren, daß die Ausgangsleistung zwischen TP1 (DECK B) [[TP2 (DECK A)]] und Masse dem Standard-Wert entspricht.

Standard-Wert: $170 \pm 5\text{mA}$ (Metal), $(170 \pm 5\text{mV})$



TPA: TP1 (Deck B), TP2 (Deck A)
TPB: VR301 (Deck B), VR302 (Deck A)

Gesamtfrequenzgang (DECK A, B)

- Legen Sie eine normale Leerkassette (QZZCRA) ein und nehmen ein Signal (50Hz~12.5kHz) von 20dB auf, das durch das Referenzeingabegleisignal (1kHz, -24dB) gedämpft wird.
- Das in Schritt 1 aufgezeichnete Signal wiedergeben und prüfen, ob der Pegel jeder Ausgangsfrequenz im Bereich liegt, der in Abb. 4 im Vergleich zur Referenzfrequenz (1kHz) gezeigt wird.
- Falls er nicht im Standard-Bereich liegt, ist der Vormagnetisierungsstrom mit VR9 (linker Kanal) [[VR10 (rechter Kanal)]] für Deck B und den VR11 (linker Kanal) [[VR12 (rechter Kanal)]] für Deck A so zu justieren, daß der Frequenzpegel innerhalb des Standards zu liegen kommt.
 - Erhöhter Pegel im Frequenzbereich.....Den Vormagnetisierungsstrom erhöhen.
 - Reduzierter Pegel im Frequenzbereich.....Den Vormagnetisierungsstrom senken.
- Anschließend das auf der CrO2-Leerband-Cassette (QZZCRX) und der Reineisenband-Leercassette (QZZCRZ) aufgezeichnete Signal auf 14kHz erhöhen und auf gleiche Weise justieren, wie vorgehend beschrieben. Dann überprüfen, ob der Frequenzpegel innerhalb des in Abb. 5 gezeigten Bereichs liegt.

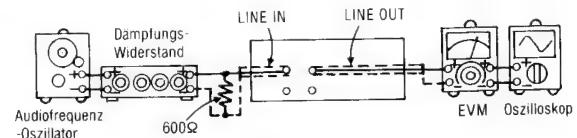


Abb. 3

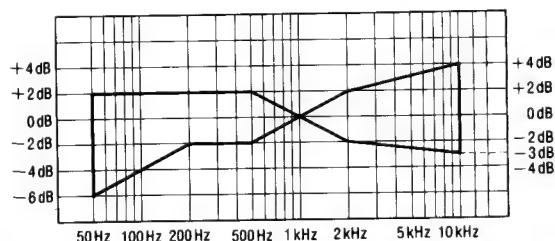


Abb. 4

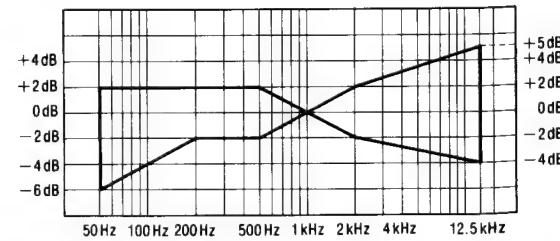


Abb. 5

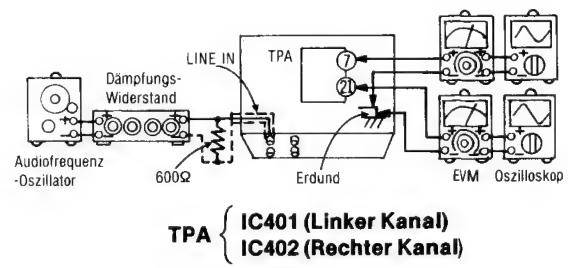
Justierung des Gesamtverstärkungsgrades (DECK A, B)

1. Der Testaufbau ist in Abb. 3 gezeigt.
2. Eine Normalband-Leercassette (QZZCRA) einsetzen und im Aufnahmepause-Zustand des Gerütes das Referenzsignal (1kHz, -24dB) eingeben.
3. Die Ausgangsleistung mit dem Dämpfungswiderstand auf 0.4V justieren und dann aufnehmen.
4. Das in Schritt 3 aufgezeichnete Signal wiedergeben und überprüfen, ob die Ausgangsleistung dem Standard-Wert entspricht.
5. Falls sie nicht dem Standard-Wert entspricht, ist der VR5 (linker Kanal) [[VR6 (rechter Kanal)]] für Deck B und den VR7 (linker Kanal) [[VR8 (rechter Kanal)]] für Deck A zu justieren, und dann sind die Schritte (2), (3) und (4) zu Wiederholen, bis die Ausgangsleistung dem Standard-Wert entspricht.

Standard-Wert: $0\text{V} \pm 0,5\text{dB}$

Dolby-Rauschunterdrückungs-Schaltkreis

1. Eine Normalband-Cassette einsetzen und im Aufnahmepause-Zustand des Gerätes ein 1kHz-Signal eingeben.
2. Mit dem Dämpfungswiderstand so justieren, daß die Ausgangsleistung zwischen Anschluß ⑦ des IC401 (linker Kanal) [[IC402 (rechter Kanal)]] und Masse 12.3mV beträgt.



—Dolby B (Dolby-C) (Kodierungseigenschaft)—

3. Den Rauschunterdrückungs-Schaltkreis (NR) auf "Dolby B (Dolby C)" einstellen und das Eingangssignal auf 1kHz, 5kHz verändern.
4. Überprüfen, ob die Ausgangsleistung zwischen Anschluß ② des IC401 (linker Kanal) [[IC402 (rechter Kanal)]] und Masse wie vorgeschrieben gegenüber dem Pegel im rauschunterdrückungsfreiem Zustand verändert wird.

Dolby-B:

Standard-Wert: $6 \pm 2,5\text{dB}$ (1kHz), $8 \pm 2,5\text{dB}$ (5kHz)

Dolby-C:

Standard-Wert: $11,5 \pm 2,5\text{dB}$ (1kHz), $8,5 \pm 2,5\text{dB}$ (5kHz)

FRANÇAIS

Ceci est à utiliser conjointement avec le manuel d'entretien du modèle No. RS-X888.

■ METHODES DES MEASURES ET REGLAGES

Appareils de mesure

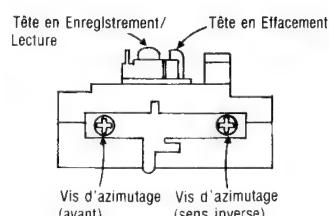
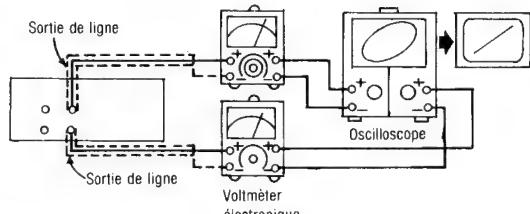
- Voltmètre électronique
- Oscilloscope
- Compteur de fréquence numérique
- Oscillateur de fréquence audio
- A.T.T. (Atténuateur)
- Voltmètre à C.C.
- Résistance (600Ω)

Réglage de l'angle des têtes de lecture

1. Faire jouer partie réglée azimutale (8kHz, -20dB) de la bande d'essai (QZZCFM) et régler la vis de mise au point azimutale de telle sorte que les puissances de sortie du canal de gauche et du canal de droite soient au maximum. (Si les positions de réglage du canal de gauche et du canal de droite sont différentes, trouver une position où les puissances de sortie des canaux de gauche et de droite soient équilibrées, puis effectuer la mise au point.)
2. En même temps, établir une forme d'onde de Lissajous et éliminer la déviation de phase.
3. Effectuer le même réglage sur le mode d'audition en sens inverse.

Vérifier la différence de niveau de rotation en marche avant et en marche arrière.

4. Faire jouer la partie réglée de l'amplification de la lecture (315Hz, 0dB) de la bande d'essai (QZZCFM), puis vérifier que la différence de niveau de rotation de la marche avant et de la marche arrière soit en deçà de 1dB.
5. Après le réglage, appliquer un blocage de vis à la vis de réglage azimutale.



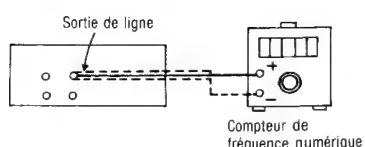
Réglage de la vitesse de défilement de la bande (PLATINE A, B)

— A grande vitesse —

1. Régler le commutateur de vitesse de défilement de la bande de montage sur "X2" et relier à la terre la platine B sur TP3 et la platine A sur TP4.
2. Faire jouer la partie centrale de la bande d'essai (QZZCWAT).
3. Ajuster la platine B sur VR803 et la platine A sur VR804 de telle sorte que la puissance de sortie soit en deçà de la normale.

— Vitesse normale —

4. Régler le commutateur de vitesse de défilement de la bande de montage sur "X1" et mettre hors circuit la platine B sur TP3 et la platine A sur TP4.
5. Faire jouer la partie centrale de la bande d'essai (QZZCWAT).
6. Ajuster la platine B sur VR801 et la platine A sur VR802 de telle sorte que la puissance de sortie soit en deçà de la normale.



Valeur standard: 3000±15Hz (normale); 6000±30Hz (élevée)

Réponse en fréquence de la lecture

1. Faire jouer la partie de la réponse en fréquence de la lecture (315Hz, 12,5kHz~63Hz, -20dB) de la bande d'essai (QZZCFM).
2. Vérifier que la fréquence soit en deçà de la plage montrée à la Fig. 2, à la fois pour le canal de gauche et le canal de droite.

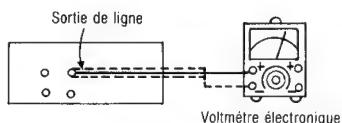


Fig. 1

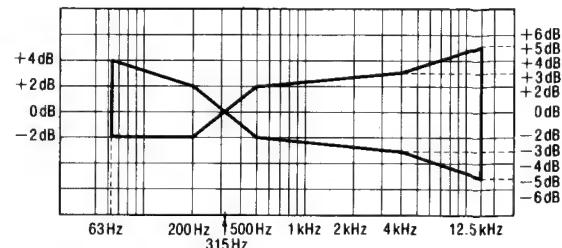


Fig. 2

Réglage d'amplification de la lecture (PLATINE A, B)

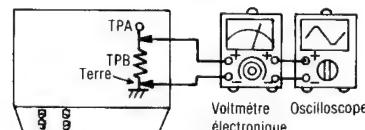
1. Le raccordement de l'équipement d'essai est montré à la Fig. 1.
2. Faire jouer la partie réglée d'amplification de la lecture (315Hz, 0dB) de la bande d'essai (QZZCFM).
3. Régler la platine B: VR1 (canal de gauche) [[VR2 (canal de droite)]] et la platine A: VR3, (canal de gauche) [[VR4 (canal de droite)]] de telle sorte que la puissance de sortie soit en deçà de la normale.

Valeur normalisée: $0,4V \pm 0,5dB$

Réglage de la tension d'effacement (PLATINE A, B)

1. Introduire la bande métallisée.
2. Appuyer sur les touches d'enregistrement et d'intermission.
3. Régler VR301 (platine B) [[VR302 (platine A)]] de telle sorte que la puissance de sortie entre TP1 (platine B) [[TP2 (platine A)]] et la masse soit en deçà de la normale.

Valeur normalisée:
 $170 \pm 5mA$ (Métallisée) ($170 \pm 5mV$)



TPA: TP1 (platine B), TP2 (platine A)
TPB: VR301 (platine B), VR302 (platine A)

Réponse en fréquence globale (PLATINE A, B)

1. Installer une bande vierge normale (QZZCRA) et enregistrer en appliquant un signal (50Hz~12,5kHz), 20dB atténuer à partir du signal du niveau d'entrée de référence (1kHz, -24dB).

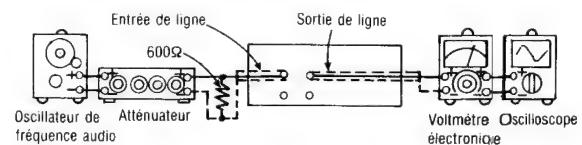


Fig. 3

2. Faire jouer le signal enregistré à l'étape 1 et vérifier que le niveau de chaque fréquence de sortie soit en deçà de la plage montrée à la Fig. 4 en comparaison avec la fréquence de référence (1kHz).
3. S'il n'est pas en deçà de la plage standard, régler le courant de polarisation avec platine B: VR9 (canal de gauche) [[VR10 (canal de droite)]] et platine A: VR11 (canal de gauche) [[VR12 (canal de droite)]] de telle sorte que le niveau de fréquence soit en deçà de la normale.
 - Niveau vers le haut dans la plage de fréquence élevée Augmenter le courant de polarisation.
 - Niveau vers le bas dans la plage de fréquence élevée Diminuer le courant de polarisation.
4. Après cela, amplifier le signal enregistré sur la bande vierge CrO2 (QZZCRX) et la bande vierge métallisée (QZZCRZ) jusqu'à 14kHz et régler de la même manière que celle mentionnée ci-dessus. Puis, vérifier que le niveau de fréquence soit en deçà de la plage montrée à la Fig. 5.

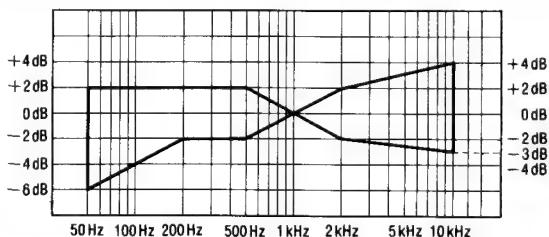


Fig. 4

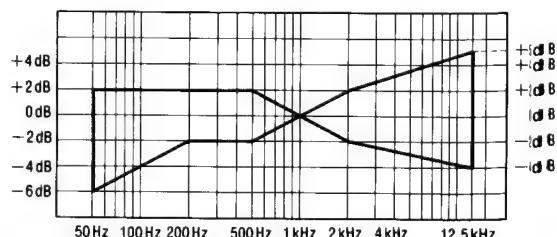


Fig. 5

Réglage d'amplification globale (PLATINE A, B)

1. Le raccordement de l'équipement d'essai est montré à la Fig. 3.
2. Installer une bande vierge normale (QZZCRA) et appliquer le signal de niveau d'entrée de référence (1 kHz, -24 dB) sur le mode d'intermission d'enregistrement.
3. Régler la puissance de sortie 0.4 V avec L'atténuateur, puis enregistrer.
4. Faire jouer le signal enregistré à l'étape 3 et vérifier que la puissance de sortie soit en deçà de la normale.
5. Si elle n'est pas en deçà de la normale, régler platine B: VR5 (canal de gauche) [[VR6 (canal de droite)]] et platine A: VR7 (canal de gauche) [[VR8 (canal de droite)]] et répéter les étapes (2), (3) et (4) jusqu'à ce que la puissance de sortie soit en deçà de la normale.

Valeur normalisée: $0\text{V}\pm 0,5\text{dB}$

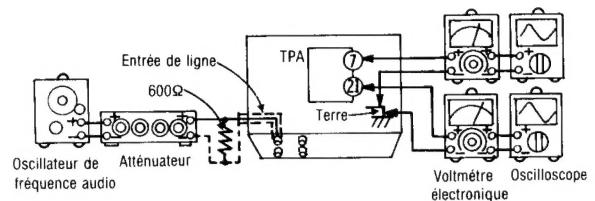
Circuit de réduction des bruits Dolby

1. Installer une bande normale et appliquer un signal de 5 kHz sur le mode d'intermission d'enregistrement.
2. Régler avec l'atténuateur de telle sorte que la puissance de sortie entre la borne ⑦ de IC401 (canal de gauche) [[IC402 (canal de droite)]] et la masse soit de 12,3 mV.

— Dolby B (Caractéristiques de codage) —

3. Régler le commutateur de réduction des bruits sur "Dolby B" et changer le signal d'entrée sur 1 kHz, 5 kHz.
4. Vérifier que la puissance de sortie entre la borne 21 de IC401 (canal de gauche) [[IC402 (canal de droite)]] et la masse change tel qu'il est spécifié à partir du niveau d'entrée sur le mode de sortie de réduction des bruits.

Valeur normalisée: $6\pm 2,5\text{dB}$ (1 kHz), $8\pm 2,5\text{dB}$ (5 kHz)



TPA: { IC401 (Canal de gauche)
IC402 (Canal de droite)

— Dolby C (Caractéristiques de codage) —

5. Régler le commutateur de réduction des bruits sur "Dolby C" et changer le signal d'entrée sur 1 kHz, 5 kHz.
6. Vérifier que la puissance de sortie entre la borne 21 de IC 401 (canal de gauche) [[IC402 (canal de droite)]] et la masse change tel qu'il est spécifié à partir du niveau d'entrée sur le mode de sortie de réduction des bruits.

Valeur normalisée: $11,5\pm 2,5\text{dB}$ (1 kHz), $8,5\pm 2,5\text{dB}$ (5 kHz)

ESPAÑOL

Sirvase utilizarse junto con manual de servicio para el model No. RS-X888.

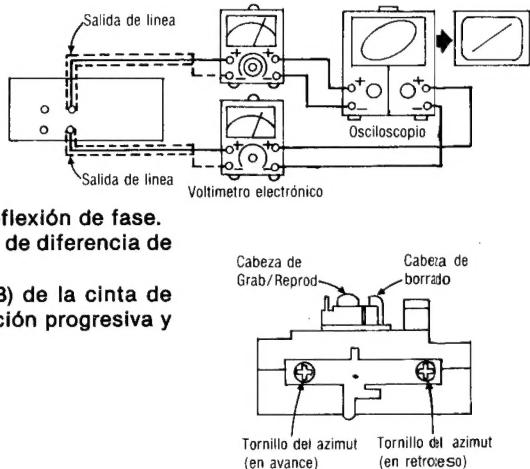
■ METODOS DE AJUSTE Y MEDIDA

Instrumento de medición

- EVM (Voltímetro electrónico)
- Osciloscopio
- Frecuencímetro digital
- Oscilador AF
- ATT (Atenuador)
- Voltímetro CC
- Resistor (600Ω)

Ajuste acimutal de cabeza

1. Reproducir la parte ajustada de acimut (8kHz, -20dB) de la cinta de prueba (QZZCFM) y regular el tornillo de ajuste de ángulo de manera que las salidas de CH-1 y CH-D sean maximizadas. (Cuando las posiciones de ajuste sean diferentes de CH-1 y CH-D, encontrar una posición donde las salidas de CH-1 y CH-D estén equilibradas y, luego, hacer el ajuste.)
2. Al mismo tiempo, trazar una forma de onda de lissajous y eliminar la deflexión de fase.
3. Efectuar el ajuste en la modalidad de función regresiva. Comprobación de diferencia de nivel de rotación progresiva y regresiva.
4. Reproducir la parte ajustada de ganancia de reproducción (315Hz, 0dB) de la cinta de prueba (QZZCFM) y, luego, comprobar que la diferencia de nivel de rotación progresiva y regresiva esté dentro de 1dB.
5. Despues del ajuste, aplicar cierre por tornillo al tornillo de ajuste de ángulo.



Ajuste de velocidad de cinta (PLATINA A, B)

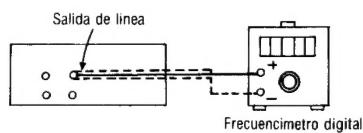
— Alta velocidad —

1. Poner el conmutador de velocidad de cinta de compaginación en "X2" y poner a tierra la Platina B: TP3 y Platina A: TP4.
2. Reproducir la parte de en medio de la cinta de prueba (QZZWAT).
3. Ajustar la Platina B: VR803 y Platina A: VR804 de manera que la salida esté dentro de la estandar.

— Velocidad normal —

4. Poner el conmutador de velocidad de cinta de compaginación en "X1" y abra la Platina B: TP3 y Platina A: TP4.
5. Reproducir la parte de en medio de la cinta de prueba (QZZCWAT).
6. Ajustar la Platina B: VR801 y Platina A: VR802 de manera que la salida esté dentro de la estandar.

valor estandar: 3000±15Hz (normal) 6000±30Hz (alta)



Respuesta de frecuencia de reproducción

1. Reproducir la parte de respuesta de frecuencia de reproducción (315Hz, 12,5kHz~63Hz, -20dB) de la cinta de prueba (QZZCFM).
2. Comprobar que la frecuencia esté dentro de la gama mostrada en la Fig. 1 tanto para CH-1 como para CH-D.

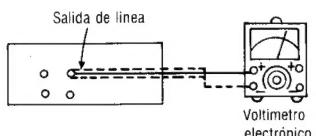


Fig. 1

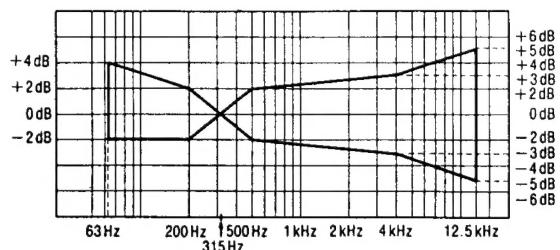


Fig. 2

Ajuste de ganancia de reproducción (PLATINA A, B)

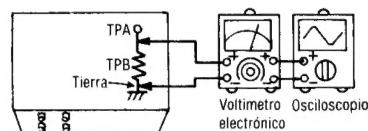
1. La conexión del equipo de prueba se muestra en la Fig. 1.
2. Reproducir la parte ajustada de la ganancia de reproducción (315Hz, 0dB) de la cinta de prueba (QZZCFM).
3. Ajustar la platina B: RV1 (CH-1) [[RV2 (CH-D)]] y la platina A: RV3, (CH-1) [[RV4 (CH-D)]] de manera que la salida esté dentro de la estandar.

Valor estandar: $0,4V \pm 0,5dB$

Ajuste de corriente de borrado (PLATINA A, B)

1. Insertar la cinta metálica.
2. Apretar los botones de grabación y pausa.
3. Ajustar RV301 (platina B) [[RV302 (platina A)]] de manera que la salida entre TP1 (platina B) [[TP2 (platina A)]] y tierra esté dentro de la estandar.

Valor estandar: $170 \pm 5mA$ (Metal) $170 \pm 5mV$



TPA: TP1 (platina B), TP2 (platina A)
TPB: RV301 (platina B), RV302 (platina A)

Respuesta de frecuencia total (PLATINA A, B)

1. Poner una cinta virgen normal (QZZCRA) y grabar aplicando señal (50Hz~12.5kHz) 20dB atenuada de la señal de nivel de entrada de referencia (1kHz, -24dB).
2. Reproducir la señal grabada en el paso 1 y comprobar que el nivel de cada frecuencia de salida esté dentro de la gama mostrada en la Fig. 4 en comparación con la frecuencia de referencia (1kHz).
3. Si no está dentro de la gama estandar, ajustar la corriente de polarización mediante platina B: RV9 (CH-1) [[RV10 (CH-D)]] y la platina A: RV11 (CH-1) [[RV12 (CH-D)]] de manera que el nivel de frecuencia esté dentro del estandar.
 - Subir el nivel en la gama de alta frecuencia.....Incrementar la corriente de polarización.
 - Bajar el nivel en la gama de alta frecuencia.....Disminuir la corriente de polarización.
4. Después de eso, incrementar la señal grabada en la cinta virgen CrO2 (QZZCRX) y la cinta virgen metálica (QZZCRZ) hasta 14kHz y ajustar de la misma manera como mencionado arriba y comprobar que el nivel de frecuencia esté dentro de la gama mostrada en la Fig. 5.

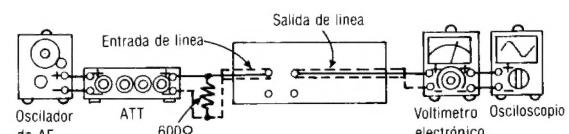


Fig. 3

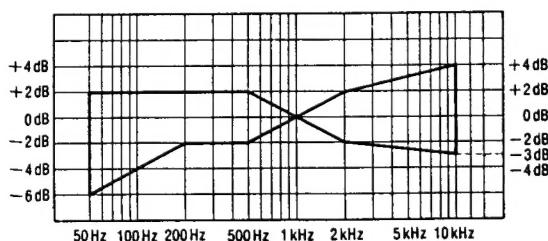


Fig. 4

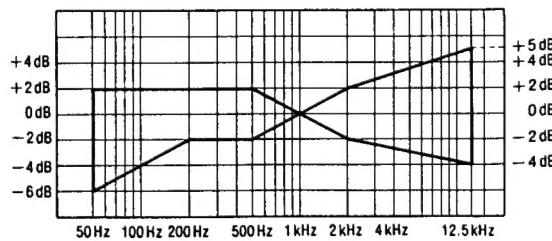


Fig. 5

Ajuste de ganancia total (PLATINA A, B)

1. La conexión del equipo de prueba se muestra en la Fig. 3.
2. Colocar una cinta virgen normal (QZZCRA) y aplicar la señal de nivel de entrada de referencia (1kHz, -24dB) en la modalidad de pausa de grabación.
3. Ajustar la salida 0,4V mediante atenuador y, luego, grabar.
4. Reproducir la señal grabada en el paso 3 y comprobar que la salida esté dentro de la estandard.
5. Si no está dentro de la estandard, ajustar la platina B: RV5 (CH-1) [[RV6 (CH-D)]] y la platina A: RV7 (CH-1) [[RV8 (CH-D)]] y repetir el paso (2), (3) y (4) hasta que la salida esté dentro de la estandard.

Valor estandard: $0V \pm 0,5dB$

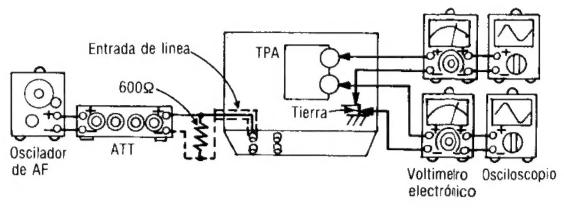
Circuito RR Dolby

1. Colocar una cinta normal y aplicar señal 5kHz en la modalidad de pausa de grabación.
2. Ajustar mediante atenuador de manera que la salida entre terminal ⑦ de IC401 (CH-1) [[IC402 (CH-D)]] y tierra sea 12,3mV.

— Dolby B (Codificar caracteristica) —

3. Poner el interruptor RR en "Dolby B" y cambiar la señal de entrada a 1kHz, 5kHz.
4. Comprobar que la salida entre terminal ② de IC401 (CH-1) [[IC402 (CH-D)]] y tierra cambie como especificado por el nivel en la modalidad de salida RR.

Valor estandard: $6 \pm 2,5dB$ (1kHz), $8 \pm 2,5dB$ (5kHz)



TPA: {
IC401 (CH-1)
IC402 (CH-D)}

— Dolby C (Condificar caracteristica) —

5. Poner el interruptor RR en "Dolby C" y cambiar la señal de entrada a 1kHz, 5kHz.
6. Comprobar que la salida entre terminal ② de IC401 (CH-1) [[IC402 (CH-D)]] y tierra cambie como especificado por el nivel en la modalidad de salida RR.

Valor estandard: $11,5 \pm 2,5dB$ (1kHz), $8,5 \pm 2,5dB$ (5kHz)